MEETING

STATE OF CALIFORNIA
AIR RESOURCES BOARD

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SECOND FLOOR

1001 I STREET

SACRAMENTO, CALIFORNIA

THURSDAY, FEBRUARY 16, 2017 9:15 A.M.

JAMES F. PETERS, CSR CERTIFIED SHORTHAND REPORTER LICENSE NUMBER 10063

APPEARANCES

BOARD MEMBERS:

Ms. Mary Nichols, Chair

Ms. Sandra Berg, Vice Chair

Dr. John Balmes

Mr. Hector De La Torre

Mr. John Eisenhut

Senator Dean Florez

Supervisor John Gioia

Senator Ricardo Lara

Ms. Judy Mitchell

Mrs. Barbara Riordan

Supervisor Phil Serna

Ms. Diane Takvorian

STAFF:

Mr. Richard Corey, Executive Officer

Dr. Alberto Ayala, Deputy Executive Officer

Ms. Edie Chang, Deputy Executive Officer

Mr. Kurt Karperos, Deputy Executive Officer

Ms. Ellen Peter, Chief Counsel

Ms. La Ronda Bowen, Ombudsman

Ms. Emily Wimberger, Chief Economist

Ms. Trish Johnson, Air Pollution Specialist, ISD

Mr. Gabriel Monroe, Attorney, Legal Office

APPEARANCES CONTINUED

STAFF:

Mr. Floyd Vergara, Division Chief, Industrial Strategies Division(ISD)

Ms. Rajinder Sahota, Assistant Division Chief, ISD

ALSO PRESENT:

Mr. Alan Abbs, California Air Pollution Control Officers Association

Mr. John Amodio, Tuolumne River Trust

Mr. Ernesto Arevalo, Communities for a Better Environment

Mr. Will Barrett, American Lung Association in California

Mr. Nathan Bengtsson, Pacific, Gas & Electric

Mr. David Bischel, California Forestry Association

Ms. Eileen Boken

Ms. Julia Bussey, Chevron Corporation

Mr. Michael Carr, Shell

Mr. J.P. Cativiela, Dairy Cares

Mr. Jon Costantino, Ad Hoc Offsets Group

Ms. Jessica Counts-Arnold, United States Environmental Protection Agency, Region 9

Mr. Patrick Cruz, Tesoro

Mr. Don Cuffel, Valero

Mr. John E. DeWitt, J.E. DeWitt, Inc.

Mr. Craig Ebert, Climate Action Reserve

Mr. Don England, Tesoro Refinery

APPEARANCES CONTINUED

ALSO PRESENT:

- Mr. Nick Facciola, Origin Climate Inc.
- Dr. John Faust, Office of Environmental Health Hazard Assessment
- Ms. Jo Fleming, California Green Business Network
- Mr. Walt Gill, Chevron
- Mr. Gary Hughes, Friends of the Earth
- Mr. Shrayas Jatkar, Coalition for Clean Air
- Ms. Deanna Martinez, Shell Oil
- Mr. Richard McCaskill, Recon Recycling
- Ms. Terrie Mitchell, Sacramento Regional County Sanitation District
- Mr. Taylor Miller, Yosemite Stanislaus Solutions
- $\mbox{Mr.}$ Brent Newell, Center for Race, Poverty, and the $\mbox{Environment}$
- Ms. Callie Nguyen, Chevron
- Mr. Sean Penrith, The Climate Trust
- Mr. Richard Quiroz, Chevron
- Mr. Craig Reed, Chevron
- Ms. Tiffany Roberts, Western States Petroleum Association
- Mr. Gary C. Rynearson, Green Diamond
- Mr. Ryan Schuchard, CalStart
- Mr. Mikhael Skvarla, California Council for Environmental and Economic Balance
- Ms. Andrea Stephenson, A Stephenson Group

APPEARANCES CONTINUED

ALSO PRESENT:

- Ms. Shelly Sullivan, Climate Change Policy Coalition
- Mr. Michael Swords, Partnership of the Los Angeles Cleantech Incubator
- Mr. Kevin Townsend, Bluesource
- Mr. Cedric Twight, Sierra Pacific Industries
- Ms. Amy Vanderwarker, California Environmental Justice Alliance
- Mr. Erik White, Placer County Air Pollution Control District
- Mr. Andy Wunder, Ceres, BICEP
- Dr. Lauren, Zeise, Director, Office of Environmental Health Hazard Assessment

INDEX PAGE Roll Call 1 Pledge of Allegiance 1 Opening Remarks by Chair Nichols 1 Item 17-2-1Chair Nichols 2 Motion 2 Vote 3 Item 17-2-2Chair Nichols 3 Motion 3 3 Vote Item 17-2-3Chair Nichols 4 Executive Officer Corey 6 Staff Presentation and Others 6 Board Discussion and Q&A 26 50 Swearing in of Senator Ricardo Lara Item 17-2-5Chair Nichols 56 Executive Officer Corey 58 Staff Presentation 59 OEHHA Director Zeise 63 Staff Presentation 68 Ms. Valenzuela Garcia 76 Mr. León 78 Mr. Olmedo 81 Mr. White 83 Ms. Roberts 86 Ms. Martinez 88 Mr. England 89 92 Mr. Cruz Ms. Nguyen 94 Mr. Reed 96 Mr. Quiroz 101 Mr. Cuffel 102 Mr. Schuchard 104 Mr. Townsend 105 Mr. Ebert 108

I N D E X C O N T I N U E D PAGE Mr. Hughes 110 Mr. Bengtsson 112 Mr. Wunder 115 Ms. Sullivan 117 Mr. Gill 119 Mr. Penrith Mr. Barrett 121 122 Mr. Newell 125 Mr. Arevalo 128 Mr. Miller 130 Mr. Amodio 132 Mr. Rynearson 135 Mr. Jatkar 137 Ms. Vanderwarker 140 Mr. Facciola 143 Mr. Costantino 144 Mr. Carr Ms. Bussey 145 148 Mr. Skvarla 150 Mr. Bischel 151 Mr. Cativiela 153 Mr. Twight 155 Board Discussion and Q&A 157 Public Comment Ms. Boken 185 Adjournment 188 189 Reporter's Certificate

PROCEEDINGS

CHAIR NICHOLS: Good morning, everyone. And welcome to the February 20 -- 16th 2017 public meeting of the Air Resources Board.

I could see, without calling the roll, that we have a quorum.

(Laughter.)

CHAIR NICHOLS: So I think I'm going to waive the calling of the role this morning, if nobody really minds.

But we do traditionally open the meeting by saying the pledge of allegiance, so would you please stand.

(Thereupon the Pledge of Allegiance was recited in unison.)

CHAIR NICHOLS: I am also required by powers that be that run this building to remind everybody that we have emergency exits to the rear of the room, and to the side. And please note where they are. And be prepared, if you need to evacuate in the event of a fire alarm, to go to one of those exits, and leave the building by the stairs, and wait for a signal to come back into the building.

I also have a couple of other preliminary announcements. First of all, we do have interpreter services available today for Spanish language speakers for the second item of the day, which is the public meeting to

hear a report on the proposed 2030 target scoping plan.

There are headsets outside the room at the attendance sign-up table. And I think we'll wait and have the translator -- well, we'll do it now, and then you can do it again before the item.

Okay. Thank you, Madam.

(Thereupon the interpreter translated

into Spanish.)

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CHAIR NICHOLS: Thank you.

We will be imposing a 3-minute time limit as usual for speakers. There are request-to-speak forms outside the room, or with the Clerk. And we appreciate it if you would give those to the Clerk. And I think with those preliminaries, we can actually get started.

So the first item on the consent calendar is Item number 17-1 -- 2-1, a public meeting to consider one research proposal. And I need to ask the clerk if any witnesses have signed up to testify on this item?

BOARD CLERK McREYNOLDS: (Shakes head.)

CHAIR NICHOLS: There are none.

Okay. Are there any Board members who would like to see this item removed from the consent calendar?

Seeing none.

Then I'll closes the record. And --

BOARD MEMBER RIORDAN: I move approval, Madam

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Chairman of Resolution 17-1.
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             BOARD MEMBER BALMES: I'll second.
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             CHAIR NICHOLS: All in favor?
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             (Ayes.)
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             CHAIR NICHOLS: Opposed?
             And abstentions?
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             Great.
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             Okay.
                    Then we move to 17-2-2. The second item
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    on the consent calendar. And this is to consider approval
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    of the Portola PM2.5 State Implementation Plan.
    again, I'd ask the Clerk if any witnesses have signed up
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    to speak on this item?
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             BOARD CLERK McREYNOLDS: No one has signed up to
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    speak.
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             CHAIR NICHOLS: No speakers.
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             And if any Board members want this item removed
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    from consent?
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             Seeing none.
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             We can have a motion.
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             BOARD MEMBER SERNA: Move the item.
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             BOARD MEMBER RIORDAN: Second.
             VICE CHAIR BERG: Second.
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             CHAIR NICHOLS: All in favor?
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             (Ayes.)
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             CHAIR NICHOLS: Opposed?
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Abstentions?

Okay. We have approval then. Thank you. That was easy.

Now, we move to a report from the Office of the Ombudsman. And this is an informational item regarding our Ombudsman -- be led by our Ombudsman La Ronda Bowen, who came to the Air Resources Board a number of years go. We recruited her to bring her expertise and leadership in small businesses and environmental issues, and to turn the Ombudsman's Office into what we hope would be a showcase in particular for a regulatory agency to also provide liaison services to members of the regulated community, also to educators and the public.

She has used a multi-pronged approach. She has worked tirelessly to advocate for including small business owners early in policy discussions, and to make sure that their perspectives and their expertise are more thoroughly integrated into our work.

She has also worked to identify and foster collaborative opportunities, to maximize ARB's access to networks that exist out in the community, and to bring to small businesses the tools and resources they need to implement ARB's policies successfully.

And third, she has worked to make the office more proactive in understanding and affecting issues that will

have an impact on small businesses, especially those in disadvantaged, rural, and low-income communities.

As climate change has become a larger part of the ARB's focus, La Ronda began a new engagement between small business, particularly those who are in the clean tech development area, and ARB to enhance their opportunities to participate in this policy agenda, in particular in areas that include freight and transportation, where we are especially in need of new technologies.

And as a result of her work, I think we can all have -- we all have observed that ARB's engagement with small businesses has become more dynamic and a more integral part of the ARB's regulatory process. To strengthen this trend, La Ronda has plans to continue to work with not only the ARB program offices, but also the Small Business Advisory Panel that she created to begin to formalize an approach to engaging small businesses in the regulatory process, beginning with the development of rules, and even the conceptualization of them and ending with the enforcement program.

She will also build on this experience to get further insights into what's going on in other agencies, and to benchmark our efforts against other agencies around the State and around the world.

So she's been a strong advocate for stakeholder

engagement, and she serves frequently as an ambassador for ARB. And I have very positive feedback wherever she goes. So, Mr. Corey, would you please introduce this item?

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EXECUTIVE OFFICER COREY: Yes. Thanks, Chair Nichols. You underscored the importance of engagement with small businesses to achieve ARB's broad and ambitious agenda, which I outlined before the Board last month.

With La Ronda as our Ombudsman, we continue to strengthen our engagement with small businesses owners and entrepreneurs to take advantage of the synergies created to help ARB implement our goals.

So today, you'll hear from La Ronda's 2 co-chairs as well for the Small Business Opportunities Advisory

Panel. Alan Abbs, Executive Director of the California

Air Pollution Control Officers Association, and Richard

McCaskill, President and CEO of Recon Recycling, a

California small business in San Diego.

La Ronda will also share a few 2016 highlights, and identify how the Ombudsman's priorities for 2017 will support those of ARB, the State, California small businesses, and all stakeholder.

And with that, La Ronda.

(Thereupon an overhead presentation was presented as follows.)

OMBUDSMAN BOWEN: Good morning. Thank you, Chair

Nichols and Board members. Thank you, Mr. Corey.

Today, I will focus on 2 major activities of the Office of the Ombudsman and Small Business: helping small businesses reduce emissions and stakeholder engagement. We will then open up the discussion for Board members to directly engage with our guests, all of whom are seated behind me.

Jessica Counts-Arnold from U.S. EPA Region 9 on grants to small business through the Green Business Certification Program. With her is Jo Fleming of the California Green Business Network.

The Small Business Opportunities Advisory Panel led by co-chairs Richard McCaskill and Alan Abbs and SBOAP members John DeWitt, Andrea Stephenson, and Terrie Mitchell. And Michael Swords will introduce the L.A. Clean Technology Incubator, the number 3 in the world small business incubator. And because numbers 1 and 2 are not technology incubators, by default number one clean tech incubator in the world. He will share the connection between small business entrepreneurs and AB 32.

Our plan for today, as we go to the next slide --

OMBUDSMAN BOWEN: -- I will give a brief overview of what the Ombudsman does, including 2 examples of compliance assistance and the lessons learned; share our

work to help businesses achieve voluntary greenhouse gas emission reductions through 3 U.S. EPA pollution prevention grants, which the California Green Business Network performed as a subcontractor.

After introducing the proposed enhanced stakeholder engagement process for small business, SBOAP co-chair Richard McCaskill will share why this is a top priority in 2017, and what the expected benefits are from enhanced small business engagement.

Co-chair Alan Abbs will share why this engagement is essential, and reflect on ARB and local air district compliance assistance for regulated businesses. I will highlight the challenges ahead and invited Mike Swords to the microphone to share the engagement of LACI, small business clean technology innovators.

We expect our presentation to take about 30 minutes, and leave ample time for Board members to engage directly with the Panel.

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OMBUDSMAN BOWEN: So the mission. The mission of the Ombudsman is to support the California Air Resources Board in achieving federal and State clean air objectives. Every thing we do has that as our bottom line.

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OMBUDSMAN BOWEN: What do we do?

Ombudsman connects the public and ARB in multiple ways. However, our 2 key responsibilities are handling problems and providing small business assistance in reducing emissions, voluntary, or required.

We have a small team, and rely on collaboration and engagement across all known sectors to achieve air quality objectives as articulated by this Board.

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OMBUDSMAN BOWEN: Compliance Assistance.

Two areas where Compliance Assistance and collaboration are proving effective for small business are moving dry-cleaners out of perchloroethylene, a toxic air contaminant, and into wet cleaning.

ARB staff, working with air districts, local utilities, and small businesses to accomplish this, learned that the key to success was peer-to-peer training. Dry-cleaners were afraid to use water on dry-clean only garments. But when a cleaner, who had switched to wet cleaning, invited other dry-cleaners to his demonstration that wet cleaning works, others followed, and applications for grants began to come in.

It another example ARB's refrigerant management rule staff learned that a key was using a concept that translated easily into the many languages spoken in California. That message was that leaking refrigerant was

leaking money.

The "Save Money" cards on-site demonstrations on how to detect leaks and report into ARB's database continue to prevent noncompliance. They also clarify that ARB's rule makes the small business owner responsible for ensuring that their business properly reports and is in compliance, even when they use a certified technician to replace leaking refrigerants.

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OMBUDSMAN BOWEN: Also ARB received free booth space at ethnic and grocery stores to promote this program.

Our pollution prevention grants, achieving the State's clean air and greenhouse gas emission reductions requires helping small businesses go beyond compliance. Small businesses are essential partners to reducing greenhouse gas emissions in their communities -- in their communities.

Excuse me -- in their communities, industries and among their employees.

So education on why and how it matters is important. Not every small business is regulated, but every small business owner can make their business more sustainable or green. The barriers are knowledge, capacity, and cost. The Ombudsman's Office, in

collaboration with the California Green Business Network, applied for and won 3 pollution prevention grants from U.S. EPA Region 9 to help businesses reduce greenhouse gas emissions, conserve water and energy, recycle, and reuse materials, and implement greener business practices.

CAGBN is a nonprofit organization that helps small- and medium-sized businesses become green, and tracks the results. It also helps expand market place for green businesses with both businesses and public consumers.

The Green Business Network consists of 25 green business programs in cities and counties throughout the State of California. Under each of the pollution prevention grants, funding was provided to expand the Green Business Programs into disadvantaged communities. This program grew up primarily in the Bay Area into disadvantaged communities and also into Southern California. EPA awarded about \$500,000 for these grants.

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OMBUDSMAN BOWEN: And from this slide you'll you can see the main tasks for each grant. Under the second grant rebates were provided to cover the cost of purchasing LED lights, recycling bins, or energy efficient equipment to encourage businesses in the disadvantaged communities to get certified as a green business, because

after the first grant, they found out that even those small costs were barriers to businesses who wanted to do green practices actually doing them.

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OMBUDSMAN BOWEN: So on reducing emissions, as of December 2016 over 3,400 businesses have been certified by the Clean -- CAGBN. That's from their inception.

The environmental outcomes, shown on this slide, have been calculated using some of the same methodologies used by CoolCalifornia and CalRecycle. Jo Fleming is here and can answer more questions and details about the metrics and how the -- how they're counted at the end of this presentation.

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OMBUDSMAN BOWEN: When we think of stakeholder engagement, the ARB established its Small Business Opportunities Advisory Panel to help ensure small business concerns are being addressed. Throughout 2016, their focus has been on ways to increase small business engagement at ARB, and in our policies, and regulations. The end result that they want is to achieve the desired or better environmental outcomes at the most reasonable cost and the least unintended impacts on small business.

The green boxes on the figure at the top depict regulator responsibilities. The orange boxes depict small

business responsibilities. The purple dotted lines depict a continual two-way feedback loop, so that the lessons learned in each stage are fed back to the next regulatory process or proceeding.

The entire graphic is a way to unpack the regulatory process. Ultimately, the outcome sought is greater and mutual understanding and collaboration on important California air quality goals. The process of getting there must work for regulators for the small businesses who implement the regulations, and for the business innovators who are creating the technologies of tomorrow.

The consultation process - I'm just going to focus on a few of the processes here - recognizes that where an emission's challenge exists, a small business may see or be aware of an opportunity. By engaging small business stakeholders more broadly and making sure they understand the regulatory results that ARB needs to attain from an industry sector, ARB may learn of complimentary changes that are already occurring in that industry. In that case, ARB may be able to use that synergy.

Small business may see an opportunity to achieve better environmental cost or societal outcomes that should not be unintentionally ruled out. Early consultation makes room to correct challenges, such as a lack of data

about small businesses, solutions, costs, ideas, or barriers. This step informs ARB's economic analysis for the policy and would be repeated for each rule.

The education process produces proposed draft regulation, provides best ideas on compliance, draft compliance assistance tools, clear guidance on where small business and ARB staff agree or disagree. The next step from here is rule adoption.

Now, I'm going to skip to compliance monitoring. Problems with regulatory compliance, including tools needed and cultural issues usually show up in the early months after the rule is enacted. Communicating these risks early and having a way to address them is critical.

And finally enforcement. Small businesses want strong and equitable enforcement. I've heard that at South Coast 10, 20 years ago, and I'm still hearing it here. SBOAP has been helpful to ARB in implementing a more productive approach in the truck rule, for example.

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OMBUDSMAN BOWEN: The Small Business

Opportunities Advisory Panel. In 1990 -- the 1990

amendments to the Clean Air Act required every State in

the territories to have a three-part program that includes
an ombudsman, compliance assistance, and a small business
advisory panel.

Our Small Business Opportunities Advisory Panel, SBOAP, was formed in 2014. The spent first the couple of years forming and learning about ARB, its policies and Regulatory processes. They listened, they consulted, and they engaged with the chair -- they engaged with Chair Nichols, Vice Chair Berg, Board Member Eisenhut, Executive Officer Richard Corey, as well as Deputies Edie Chang, Alberto Ayala, as well as ARB staff.

They have talked to their peers and among themselves. They do not minimize ARB's current efforts to engage small business. They're very appreciative of the work that this agency already does to reach out and include small businesses.

The stakeholder engagement process does recognize that an ARB culture change, similar to what is occurring to engage environmental justice concerns, is needed to more thoroughly incorporate small business knowledge, ideas, and experience into our thinking and regulatory processes.

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OMBUDSMAN BOWEN: SBOAP has 3 co-chair, ARB, small business, and CAPCOA.

Richard McCaskill, President of Recon Recycling represents small business. Mr. McCaskill, a Desert Storm Special Forces Marine built a recycling business from zero

to about a million dollars over a 7-year period, and changed his city's perspective on the value of using light-duty instead of heavy-duty trucks for recycling, and from waste management to thinking more about recycling.

He recently closed his recycling business, and became a consultant. Mr. McCaskill will summarize the SBOAP's primary goals for 2017.

Richard.

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MR. McCASKILL: Good morning, Board members.

Thank you for seeing us this morning. Thank you, La Ronda
Co-Chair Nichols, Vice Chair Berg, and members of the
Board.

I appreciate Mr. Corey, Mr. Ayala, Ms. Chang and the ARB staff who have engaged the Small Business
Opportunity and Advisory Panel. I'm honored to be here with my co-chairs representing the small business advisors to the ARB. Our ranks include a contractor, an auto dealer, fuel distribution, food manufacturing, furniture manufacturing, trucking, media, and waste sectors.

We span the State from the San Diego region in the south all the way to Fort Bragg in the far north. In between we catch Riverside, Los Angeles, Hughson in the Central Valley. We are diverse, yes.

We have in common -- what we have in common is

our strong commitment to the triple bottom line - a healthy environment, a healthy resilient small business base for California's economy, and an equitable society.

We also have a direct stake in the work of ARB and your partner organizations, because what you do affects not only the health of our families and employees, but also our businesses and our communities.

And that is why we spent 2016 working through Air Resource -- or ARB's regulatory development, economic analysis, and outreach processes to see what we could contribute to make them stronger, and better to ensure that you get the results you need, while creating fewer hardships for California small businesses.

We would be willing to discuss specific cases after this meeting. SBOAP, or the Small Business
Opportunity and Advisory Panel is recommending that ARB pilot the stakeholder engagement process that La Ronda outlined earlier with a policy issue or regulation chosen by ARB.

In 2016, SBOAP identified 3 reoccurring issues for small businesses relative to ARB, and air district regulations: outreach, economic analysis, and stakeholder engagement.

All SBOAP members contributed to discuss -- or contribute to discussions on each of these aspects. La

Ronda took all of our comments and fit them into
the -- into the process chart, which you see before you
today. With Alan and I today, our SBOAP members, Andrea
Stephenson is here with us, John DeWitt, and Terrie
Mitchell.

La Ronda.

OMBUDSMAN BOWEN: Thank you, Richard.

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OMBUDSMAN BOWEN: You see from the map, Alan Abbs is -- there are 35 air districts in California. Alan Abbs is the Co-Chair of the CAPCOA, and became the air district co-chair for the SBOAP at the end of 2015.

Alan brings the perspective of a former air pollution control officer from the small district of Tehama. Today, Alan will share the value of new perspectives in achieving climate goals, and also ways in which ARB and districts are collaborating to provide greater compliance assistance to California's small businesses.

Alan.

CAPCOA EXECUTIVE DIRECTOR ABBS: Thank you, La Ronda. Coming from a small district, it's easy to recognize that small businesses have a history of looking at a problem and seeing different solutions than

regulators.

One goal that enhances small business engagement is to learn from each other. This is important, because we need all the creative solutions we can find to meet the current challenges and those ahead.

Whatever process ARB and SBOAP developed for stronger engagement of small businesses will also help our smaller air districts and our larger air districts.

In a similar vein, ARB and local air districts currently use a number of tool for compliance assistance to regulated businesses. In our stakeholder engagement Chart, these tools would be discussed and some developed in draft form during the mutual education process.

While this might pose a burden on very small districts, the process should be informative to everyone. Lessons learned from a pilot would likely be useful to all. And so I support the SBOAP goal of developing a more robust small business engagement process.

La Ronda.

OMBUDSMAN BOWEN: Thank you, Alan.

This is about connecting. Our theme is using collaboration and engagement to support ARB in achieving State and federal clean air objectives through this network of stakeholders, we can help inform policy, encourage the demonstration and deployment of cleaner

technologies, and identify knowledge gaps that could become obstacles to our success.

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OMBUDSMAN BOWEN: In 2016, small business engagement at all levels is essential. Finding better ways to utilize this most valuable resource and supporting it is critical.

So the ombudsman needs to continue to meet the challenges ahead. The purpose of this slide is to remind us of the challenges as Executive Officer Richard Corey outlined in January.

In a moment, I will introduce a relatively new stakeholder to our conversation, Michael Swords. He is the VP of partnerships at the L.A. Cleantech Incubator, which hosted a dialogue between some of our L.A. area Board members and the LACI small business clean technology developers in 2016.

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OMBUDSMAN BOWEN: Just go through that one. There's a resource slide that you guys will have, if you need it

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OMBUDSMAN BOWEN: I will now ask Michael Swords to give his comments. And then we will hear from Jessica Counts-Arnold on the pollution prevention grants.

Mike.

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(Thereupon an overhead presentation was Presented as follows.)

MR. SWORDS: Thank you, La Ronda. My name is Michael Swords, and I'm the vice president of government relations for the Los Angeles Cleantech Incubator, or LACI. I'd like to thank Chair Nichols and the Air Resources Board for inviting LACI to participate in this meeting.

LACI is a nonprofit public/private partnership created by the City of Los Angeles about 5 years ago that was part of a strategy to revitalize the downtown industrial core of Los Angeles. And LACI was to be the component that would focus on supporting the growth of early stage cleantech companies. And then there will be several other features that would bring in larger scale manufacturing back to that area.

Since the fall of 2011, LACI has helped 64 companies. We've raised \$118,000,000 in funding for our companies. We've created 1,200 jobs both directly and indirectly. And the city of Los Angeles estimates that we have created \$270,000,000 in economic value for the L.A. region.

How do we do this?

We do it by providing access to world class space

in an incubator or a co-working space. We provide coaching and mentoring. We have 8 executives and residents all of whom have C level experience. We also have a network of over 60 mentors and advisors that we can draw upon to help our companies. We provide access to funding, and we provide access to institutional partners.

So we have agreements in place with the Los Angeles Department of Water and Power, Southern California Edison, Metropolitan Water District, and several other large organizations. We now have satellite campuses at Cal State Northridge, the Port of Los Angeles, Silicon Valley, and we're working with the Mayor of Mexico City to develop an incubation program there. And we're also working with the World Bank in developing a program in Addis Ababa, Ethiopia.

LACI is proud to partner with the State of California on several major initiatives. We are one of the State's 16 innovation hubs. We run an advanced transportation center that is funded by the California Energy Commission. And we were recently awarded a \$5,000,000 grant by the CEC to create a regional energy innovation cluster with several of our partners in L.A., Santa Barbara, and Ventura counties.

We also moved into a world class space about 15 months ago. It's 60,000 square feet: 30,000 square feet

of space is devoted co-working, 30,000 square feet of laboratory space. We believe that the State policies that are up on the screen right now are really driving the demand for many of our companies' products and services. Whether it's in the electrification and transportation, solar panels, any kind of distributed energy generation, water efficiency, leak detection, you name it, LACI companies are benefiting because California has taken such a leadership role in promoting these technologies with their policies.

We would like to encourage the Air Resources
Board and other State agencies to bring early stage
companies into the conversation, and to create further
levels of engagement. And we recently hosted, I think it
was noted earlier, a meeting with the Air Resources Board
in August. And we hope to do more of that level of
engagement. And I'll stop there.

OMBUDSMAN BOWEN: Thank you, Mike.

Now, I'd like to introduce Jessica Counts-Arnold. And again sitting with her -- she's from U.S. EPA and gave us those wonderful grants, about \$50,000 worth to help these businesses. And we gave -- subcontracted the grants to California Green Business Network. The State of California does have a California Green Business Program. It was established by the Legislature.

Unfortunately, the funding for that had to be redirected, and so we really want the help, we really want the emissions reductions. And so we have reached out to EPA, and they've graciously given us the grants. And Jo Fleming from the California Green Business Network implements them.

Thank you.

Jessica.

(Thereupon an overhead presentation was Presented as follows.)

MS. COUNTS-ARNOLD: Thank you, La Ronda, and thank you Chair Nichols and the California Air Resources

Board for inviting me to come and speak to you today about the Pollution Prevention Program.

So next slide, please.

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MS. COUNTS-ARNOLD: So what we do, we do projects and we have partnerships. But overall, the Pollution Prevention Program is to work with State, federal, local governments, tribes, small businesses to help reduce pollution at the source. So that's the first -- what we want to start first.

We award grants, as La Ronda had mentioned, and I'll talk more about that. We have 2 types of grant programs -- excuse me -- and we service the region. So we

are the P2 provider for our region. And we help make connections and convene.

Next slide, please.

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MS. COUNTS-ARNOLD: So we have 2 types of grant programs, the Pollution Prevention Grant Program is a competitive grant program. It provides technical assistance and services and training for businesses. The grant supports projects that utilize pollution prevention techniques to reduce and eliminate pollution from air, water, or land.

Eligible recipients include State agencies, trust territories, tribes, and tribal consortiums. Projects must target the P2 program's national emphasis areas, which are climate change mitigation, and prevention of greenhouse gas emissions.

The next one is State or community approaches to hazardous materials, and source reduction, and food manufacturing. We typically receive \$380,000 each year for grants, and we award 3 to 4 grants per year. This program has recently moved to a 2-year grant cycle, so the next solicitation will come out in 2018.

The partnership with the California Green

Business Network and the California Air Resources Board

helps to provide technical support to help small- and

medium-sized businesses reduce their environmental impact, and also is focusing in economically disadvantaged communities. We really appreciate the dedication and leadership of the California Air Resources Board, and the Green Business Network partners. We feel like this is a gold standard and a model that other states can use.

These grants support the projects that help businesses cut their greenhouse gas emissions, conserve energy and water, and reduce their hazardous waste generation. And pollution prevention saves money and lower utility and waste disposal costs, while increasing efficiency.

And the Green Business Program is a great model. It shows how businesses can operate in a more efficient way, cost effective way, and a sustainable way. And we have really enjoyed working with our partners to leverage our resources.

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OMBUDSMAN BOWEN: Thank you, Jessica.

Madam Chair, that concludes our presentation, and we're open for dialogue with the Board.

CHAIR NICHOLS: Great. Well, you've opened up a number of interesting topics of conversation that -- and I know that Board members are going to want to pursue them.

But I think I'll start with my Vice Chair, who also is our

resident small business owner.

VICE CHAIR BERG: Thank you. Well,

Congratulations, La Ronda, and thank you so much again for assembling such a great group to come and make this presentation. When we look over the 4 years, as to where we've started to where we are today, I, for one, just want to say congratulations and thank you for -- to everyone for all of your hard work.

It really, after being in our meeting yesterday, it really looks at -- yesterday, we had a meeting with the EJAC committee looking at the scoping plan, and how it affects our disadvantaged communities. And here we do have one element that we would be able to offer. And so I'm really interested to hear a little bit more about this pilot program that you're thinking about. High level, what would be some of the criteria you'd be looking at, what are some of the timelines, and what assistance that you need?

And then, of course, the incubator. Everybody is looking for avenues to be able to get access and to hear from EPA about these grants as another very good news story.

And La Ronda, how do we take this information and provide it to people like our EJAC Committee that is looking for opportunities to connect? How can we have our

EJAC Committee meeting at the incubator, so we can introduce people, so they can start networking, and we can just be the opportunity that really helps opening up these doors?

So just to summarize, how are you looking at the pilot program, kind of what is your timing, what are your thoughts, what do you need from the Board? And then secondly, how are we taking all this great information and getting it to the people that truly do need it, and how can we help facilitate that?

OMBUDSMAN BOWEN: Thank you. Do you want me to answer now or wait for all the Board members?

Okay. On the stakeholder engagement process, what we would like to do, I think, is to get your permission to go back and flesh that out, and then bring it back as something the Board could actually have all the details in and guide us to adopt or to implement.

But I think right now where we are is that the -we've looked at all the different elements that the SBOAP
members think need to be addressed, and we -- in the 3
areas that they really want to focus on. So we would like
to take a rule or a policy from the current, either
scoping plan or the executive officer priorities, and just
start from the beginning with engaging the SBOAP, inviting
them to develop a pathway for that particular rule. How

do we do the consultation, how do we get the businesses there?

You know, there's still a big mistrust, as you guys know already. How do we get the businesses there?

But we'd like to be able to develop a pathway forward and bring that back, and have the Board decide that that -- that that's a workable approach.

So interim steps would be internally we would take the information we have and finish our meetings with -- we've been talking to the Deputies, but we really do need to engage ARB staff and get their input. And then develop a step-by-step process, and bring it back maybe in 3 months or so.

VICE CHAIR BERG: So that sounds great. Of course, the land mines in this is making it too wide. And so really being able to understand what our objectives are, so to meet ARB objectives, as well as how we impact small business, and so that we can make sure that the program that we're putting together does -- is measurable, and does obtain the goal.

I think it's great to reach out to staff and to continue to have small business at the table, so we're not assuming or talking past each other. So I think those 2 pieces are really important.

And my schedule is freeing up, and so I'm

available, if you need me.

OMBUDSMAN BOWEN: I'd love to consult with you, Vice Chair Berg.

On the how do we get information, how do we take the information we get and get it back out to the communities and out to the businesses?

That group is actually pretty well -- this group meaning the SBOAP members are pretty well connected in their own industries. And they're very good at diffusing the information that they have and bringing information back. But one of the things that they're constantly asking me, in terms of outreach that the agency does, it's usually, you know, people that already know us.

So one of the things that this group is interested in doing and learning more about is how they can use the Air Resources Board to build the relationships. That means having you guys out in the field sometimes, if that's possible. You know, I realize everybody is very, very busy. But they're willing to help set up meetings with small business organizations, so that there's actually a face on the Air Resources Board in the communities.

We also get information when -- out, not only through the net -- their internal networks, but they belong to many different organizations, faith-based

organizations for faith-based businesses, areas where we have difficulty, the Ombudsman has difficulty reaching.

The EJAC made me smile when you raised that, because when -- I think it was Richard watching the Board meeting of January heard the EJAC members -- was it you, Richard?

MR. McCASKILL: (Nods head.)

OMBUDSMAN BOWEN: -- was so excited. Well, we want to meet those people. We want to get together with them. So that is definitely on our agenda to reach out to the different groups that are already working in various aspects of environment. That's what we do. So we'll just continue to keep making those connections.

Internally, I think we can do a better job of feeding back what are the things that surface up, the positives and the less positives.

VICE CHAIR BERG: You know, it really is so telling that as we have looked at various issues over the years, and how siloed things are, rightfully so. But on the issues going forward, how important it is going to be to integrate.

And I know, Mr. Corey, we've got a new position starting on March 1st. And from an executive perspective, maybe having an opportunity to have truly a cross-integration program that would include the

ombudsman, would include your objectives, our objectives, and this new position with the EJAC. How do we feed these together in a way that people are feeling that their issues are being heard and we're addressing them?

So I think it's all very, very exciting. You know devil continues to be in the details in how we spend our time and resources. That's always a challenge. And we're here to help.

And congratulations again, La Ronda.

OMBUDSMAN BOWEN: Thank you.

CHAIR NICHOLS: Mrs. Riordan.

BOARD MEMBER RIORDAN: Yes. Thank you. First of all, thank you all for being here, and participating with us. I just want to speak a little bit about the incubator concept. And having had the opportunity to be there, I was very impressed with the diversity of those who were participants in that program. And I think that might be a very helpful -- I know you're reaching probably within your area, but there may be some areas that are, you know, mindful of the restrictions they have, but could participate perhaps with you, if they knew more about you.

So I hope, besides just looking maybe to -- I think you named a couple of other counties that you were working with. Stretching that a little bit further. I don't know if there is a comparable group in the Bay Area.

There probably may be. But I'm just thinking in Southern California where I have a little bit of knowledge that if you were to reach out, they may profit greatly by knowing that there is that opportunity, and of the wealth of support you have there, and the ability to develop things that are, you know, not -- they're not able to do in their own particular area.

MR. SWORDS: So I just wanted to let you know that LACI recently received a \$200,000 grant from JP Morgan to create a diversity and inclusion initiative. And so we've hired two full-time staff whose job it is is to create these programs of outreach that you're talking about. We've already hosted, just in the last 3 months that this program has been in existence, we've already hosted I think 5 events, where we've brought in a lot of the environmental justice groups, we've brought in economic development organizations, we've brought in nonprofits that are working in south L.A., and San Pedro, and several other areas.

We have recently taken over management of PortTech Los Angeles, which is an incubator in San Pedro. And we're using that as a vehicle to reach out and to all their stakeholder groups. And so we have made this a strategic initiative.

I can't speak to what we're doing in the Bay Area

yet. That is still, you know, a very nascent sort of project. But I know that our director there has been working with the Mayor's office to really focus on equity and inclusion.

BOARD MEMBER RIORDAN: Great. I wish you well with your outreach.

CHAIR NICHOLS: Dr. Balmes, then Mr. Serna.

BOARD MEMBER BALMES: I also would like to thank everyone for being here and for all the efforts you've made to work with us. I do think that this kind of public-private partnership is really the right way to go.

But I was really intrigued by what Vice Chair
Berg just said about integrating our efforts with EJAC and
the small business community, because yesterday, we heard
a lot about jobs and creating jobs in disadvantaged
communities. And I think there really is an opportunity.
So I'm glad that Mr. McCaskill expressed some excitement
about meeting the EJAC.

So I just want to endorse Ms. Berg's idea.

CHAIR NICHOLS: Great. Mr. Serna.

BOARD MEMBER SERNA: Thank you, Chair.

So I, too, want to add my sincere thanks and congratulations to La Ronda and the folks on the SBOAP.

You're doing great work, and it's obviously very important work. I think we can all admit that oftentimes this

agency gets an undeserved bad wrap for not reaching out and not working with economic interests across the State, which is, I think, obvious by the work done to date, is untrue.

I had a couple questions and comments here. The first is you had a slide, La Ronda, that had the - a very impressive one - total cost savings of the -- it's from the outcome report, Reduced Emissions from Small Businesses.

And when you have -- when you have an impressive slide like this and you have a list of multi-hundred million dollar cost savings, you always want to have a grand total at the bottom.

(Laughter.)

BOARD MEMBER SERNA: So it's about -- it's a little over \$400,000,000.

(Laughter.)

BOARD MEMBER SERNA: So just to put a finer point on that.

And then I wanted to know how -- is there a particular process or criteria for the stakeholders that are listed on one of the slides here? And I don't know if that's an exhaustive representation or not.

OMBUDSMAN BOWEN: No, you're talking about the slide that shows all of our collaborators.

1 BOARD MEMBER SERNA: Right.

OMBUDSMAN BOWEN: That is not an exhaustive list.

BOARD MEMBER SERNA: Okay.

OMBUDSMAN BOWEN: It is the ones we've worked with most recently the past year and a half.

BOARD MEMBER SERNA: Okay.

OMBUDSMAN BOWEN: And if we made an exhaustive list, it would be more than probably 5 slides. We're constantly looking, you know, sort of -- Vice Chair Berg alluded to this, we're always looking for new partnerships, new places, people that we can collaborate with. We pick everybody's brain, who do you know, who are you working with, and we try to follow up.

BOARD MEMBER SERNA: So there have been some comments already by Board members about the Bay Area and some opportunities that might be exploited there in a good way. Is the Bay Area Council part of this?

OMBUDSMAN BOWEN: Yes. Jo's group -- Jo Fleming's group, we've worked very closely --

BOARD MEMBER SERNA: Okay.

OMBUDSMAN BOWEN: -- with Bay Area Council of Governments.

BOARD MEMBER SERNA: And then in Sacramento, what about the Greater Sacramento Economic Council, which is a relatively new group. GSEC.

OMBUDSMAN BOWEN: I'm not familiar with them.

BOARD MEMBER SERNA: We can talk off-line, but I would encourage you to reach out to GSEC. And I think that would be another good collaborator for this initiative.

OMBUDSMAN BOWEN: Thank you.

BOARD MEMBER SERNA: Thanks.

CHAIR NICHOLS: Great. Yes, Ms. Takvorian.

BOARD MEMBER TAKVORIAN: Thank you. Let me add my congratulations, La Ronda. Great work. And to everyone that you brought together. Thank you all for being here.

And I think we all -- we want to really acknowledge the intentional work that you've done in working in disadvantaged communities. And we know that it's critically important. We particularly appreciate your sensitively to providing information in Spanish. And we talked about the need to expand beyond Spanish, but we know that that is a critical language that's important for many of our communities, and that we know that there are many others in many other businesses in other ethnic communities that have other languages. So I know we'll all strive for that. And I, for one, wanted to offer that assistance where we can.

We have over 40 languages in City Heights in San

Diego. So we're -- I told La Ronda we're up to 5 languages in our community meetings, so we're -- it's a constant challenge. So -- so we appreciate that, and want to help whenever we can.

I also had shared with her that I understand the dilemmas and challenges of being a small business person. I'm the daughter of a small business man who was a union carpet layer, who achieved his dream of becoming the owner of a carpet cleaning business, which unfortunately used a lot of toxic chemicals.

(Laughter.)

BOARD MEMBER TAKVORIAN: And, you know, I didn't think there was anything more fun than playing in all of that as a child. But on very serious side, my father then contracted Parkinson's Disease, which we're very sure was related to his exposure to those chemicals.

And so, you know, it's serious for the communities that these companies are in, and it's serious for the owners and for the workers, so I think we share a mutual goal of wanting these to be the healthiest workplaces that they possibly can be.

And from an environmental justice perspective, there are small businesses that are also challenged by being in communities with incompatible land-use practices and zoning that allows these businesses to be right next

door to homes and schools. And we know that those businesses came in in a legal way. The cities have allowed that to occur. So it's even more important that are they -- if they are to stay, that they be as clean as possible as we kind of sort out that incompatible land use.

So I think that's another imperative that we really haven't talked about as to why it's really important for these businesses to get the kind of help that you're providing.

I wanted to agree with Board Member Berg that I think there's an integration here with the scoping plan that we talked about yesterday, that if there are funding opportunities potentially -- especially for items that may be outside of the ARB's purview, that maybe those get added to the scoping plan analysis that we talked about yesterday, where we would outline what we have the authority for, what we don't, and perhaps what funding possibilities there are.

And that kind of leads me to our EPA representative. And I don't want to put you on the spot, but we've all heard rumors about the freeze at the federal level of these -- of these good programs. So do you have good news for us about that?

MS. COUNTS-ARNOLD: I don't have any news for

you, but -- so the freeze pertains to our hiring, but not our grants and contracts, so that's the good news. And we fully intend to continue to support this program. So until we hear otherwise, we're going forward.

BOARD MEMBER TAKVORIAN: Good. Well, we're all keeping up as much as we can with the news, but thank you very much. It's a great program, and followed the Pollution Prevention Program for a long time. So thank you for being here and sharing that with us.

CHAIR NICHOLS: That's great.

Mr. Gioia.

BOARD MEMBER GIOIA: Thanks for the presentation. And I don't want to repeat all the good comments made by colleagues here. So I will just add I think where there are opportunities to work with local agents -- local government, whether it's through agencies like the environmental health departments that enforce State law, and environmental health, or whether it's permitting, I do think that relationship with those local permitting entities are helpful, because oftentimes for small businesses it's tied up with those requirements as well.

So just briefly, what opportunities -- it doesn't sound like you've done that much in that area, or correct me if I'm wrong, and how do you -- how do you see that opportunity, in terms of -- with the current resources

that you have, that we collectively have in this area?

OMBUDSMAN BOWEN: We work a lot with the local air districts, obviously, because there's --

BOARD MEMBER GIOIA: Right, with the local air districts. I'm talking local city and county government.

OMBUDSMAN BOWEN: Local city, not as much.

Mainly through the Green Business Network --

BOARD MEMBER GIOIA: Right.

OMBUDSMAN BOWEN: -- the work that they do.

They're connected with most of the cities and counties.

Many cities still do have economic development functions.

BOARD MEMBER GIOIA: Right.

OMBUDSMAN BOWEN: And we typically connect through them. We work a lot with the universities and with the schools --

BOARD MEMBER GIOIA: Right.

OMBUDSMAN BOWEN: -- and not as much with individual -- I mean, with all the cities that are around, no. With the Governor's Office of Business and Economic Development, we -- we work very closely with them to understand what's happening with the -- the employment, you know, development department. So how -- where are the jobs happening, where are the problems happening, what resources are available to get to small businesses to help them higher somebody, if they need to hire somebody.

We look at the Franchise Tax Board, you know, what opportunities do they have. So wherever there are other government resources, we are -- those we're constantly seeking out, and trying to connect those to the small business folks. But actually, sitting down with like the city manager and trying to figure out where we can do things collaboratively, we haven't done that, and that's a great suggestion.

BOARD MEMBER GIOIA: Great. Okay. And I'd be glad to offer thoughts, which I'll do off-line. Thanks

OMBUDSMAN BOWEN: Thank you.

CHAIR NICHOLS: So before we wrap this up, I want to focus briefly on another aspect of your work, recognizing the presence of Alan Abbs on the Small Business Advisory Committee, and specifically to highlight the fact that small businesses are also located in, and many times are the only businesses located in, communities in rural areas.

And we have a divide in our State, demographic divide, which is only growing in terms of increasing concentrations in the urban areas, and, you know, relative lack of resources in some of the most rural parts of our State, which cover the largest geography. Most of us here are urban people. Ms. Riordan represents the rest of them and does an able job, but she's outnumbered on a regular

basis.

And frankly, it's even more difficult sometimes to think about how to design regulatory programs or assistance programs in a way that rural areas can take advantage of.

And so I just wanted to acknowledge that, and also ask again if Alan has any particular thoughts or advice about ARB's work in these areas, and whether there are any sort of cross-cutting kinds of ideas that we might want to be considering.

CAPCOA EXECUTIVE DIRECTOR ABBS: Well, thank you, Chair Nichols. You put me on the spot there.

(Laughter.)

CHAIR NICHOLS: Sorry. And I didn't warn you either.

CAPCOA EXECUTIVE DIRECTOR ABBS: As La Ronda mentioned, I used to work in Tehama County and lived there for many years. And in a rural district like Tehama County, a lot of the work that the air district staff does is really sitting down with folks that come into the office and helping them get a permit, apply for a permit, tell them the rules that apply to them, and basically getting them through the process from start to finish, whether it's -- whether it's getting a burn permit, a stationary source permit, incentive grant.

And so a lot of the work that happens in the rural areas is really retail, talking with folks and, you know, going through the entire process. And so I think you pointed out a big discrepancy between how things happen with -- in rural areas versus urban areas, the importance of small businesses, not only in urban areas, but in rural areas as well.

And I think it is important to be able to -- one of the things I think ARB has done right is to try to get out throughout the State and host workshops in areas where some of the problems are really -- or go out to where the problems really are.

And so, as an example, during the Truck and Bus Rule changes, ARB did some significant work going around the State to areas and trying to explain how the rulemaking would affect the business owners in that part of the State. And I think things like that ended up being really successful, in terms of getting folks to a better understanding of how the rules were going to affect them.

So I think that that's a good -- a good strategy going forward. Obviously, any help that air districts can get in continuing to do the work that they do on a daily basis in those areas would be appreciated as well.

CHAIR NICHOLS: Well, I guess you haven't chosen the rule that you're going to work on as your pilot

program yet.

OMBUDSMAN BOWEN: No. Do you have a suggestion?

CHAIR NICHOLS: But -- No, I'm not about to make a nomination, but I was going to suggest that if it's one where there -- I assume it would be where there are -- where there are impacts all over the State of California, that you'd put in a component that specifically addresses this issue of the disparity between rural and urban areas, in terms of how to -- how to do it.

We've confronted a number of these issues at the Board, with the Truck and Bus Rule, when we talked about school buses, and just in terms of the differences in the way people experience air pollution around our State.

And so I just -- I'd like to at least make that a feature of whatever it is you're going to end up doing, and look forward to hearing more about it.

Other questions, comments?

BOARD MEMBER RIORDAN: No, but I thank you for the last comment. One of the things that small districts have little or no money to really help their small businesses. And so if there is a way that we find, with the help of some of our partners, that we could get that message out to CAPCOA. I'm thinking that is probably the best way to do it quickly, to let the members of CAPCOA, who are in those small districts, have that kind of

information. They can sometimes put the appropriate business with appropriate opportunities for grants, as well as education.

I mean, we, I think, try to do both. But I can just tell you that the small air pollution control districts just simply don't have a lot of money to assist their small businesses.

CHAIR NICHOLS: Right.

BOARD MEMBER RIORDAN: Thank you.

CHAIR NICHOLS: Thank you. Okay. Last words?

OMBUDSMAN BOWEN: Chair Nichols, if there's time, maybe 1 or 2 of the SBOAP members would just like to say

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CHAIR NICHOLS: I'm sorry?

OMBUDSMAN BOWEN: If there's time, a few of the SBOAP members would just like to say thank you to you.

CHAIR NICHOLS: Oh, of course.

MS. STEPHENSON: Thank you. I guess I get to go first. No pressure.

We are very, very excited about the opportunity to come before you and demonstrate our willingness and eagerness to develop these relate -- and continue to develop these relationships that we are working to develop with the 3 million small businesses here in the State of California.

That work could not be done obviously without the support of this Board, and the foresight of the impacts and the improvements that are going to take place as a result of the actions that you take regularly.

And we just want to say thank you very much for allowing us to be a part of this. Thank you for allowing us to approach you today, and to be before you and answer any questions, and thank you.

CHAIR NICHOLS: Well, thank you for your time.

Really, it's -- I know it's taking away from other things
you could be doing, so much appreciated.

MR. DeWITT: John DeWitt with -- there we go.
Oh, there's the green light.

John DeWitt, J.E. DeWitt, Incorporated. We are a family run and owned business for 70 years in the San Gabriel Valley. And I ditto my partner -- chair partners conversation. I do have one question for you all, and which we in small business are concerned about is, what does it cost?

We have to measure our costs on a budget. We project a budget, and then we go back and say what stones do we stub our toe on, and where did the costs -- where are the costs?

And this is from DeWitt, not necessarily from anybody else, but I would like to see you put a program in

place to measure the costs. You have benefits. You have costs. How do we project it what it might be?

What happens?

Thank you again.

CHAIR NICHOLS: Thank you.

Hi.

MS. MITCHELL: Good morning, Chair Nichols members of the Board. Again, my name is Terrie Mitchell. I just would like to also express our thanks for having this Committee going forward, and really helping establish processes to help small businesses. And I think there was a common theme you heard today that how to better a great environment -- integrate environmental sustainability, economic growth, and small business assistance.

And they are -- they can be blended together, and that bridge needs to be built on how can we affect that process. And I think with our stakeholder engagement process, I really think it opens the lines of communication between the regulated community, as well as with the regulators.

And oftentimes, there's really good solutions that can come from that. So you can hear from businesses on how they can address compliance issues, and that can get brought in early into the regulatory process. And so I think we're all looking forward to having that

engagement, and putting this through a process, and hopefully that will help small businesses in the future.

Thank you.

CHAIR NICHOLS: Thank you.

Okay. Thank you, La Ronda, and thank you, members of the Committee. I know that what you're doing sometimes might seem like it was swimming against a tide, but, believe me, we recognize the importance of what we learn from you in making our programs better. So we truly want to thank you for that, and hope that you feel that we are listening, and we are grateful for the input, because in the long run we won't succeed without you and the communities that you represent, the groups, the constituencies that you -- that represent, recognizing that this is a complicated process, and it gets technical.

And, you know, you commented about the economics. Just trying to do a study of the cost of a particular rule when you have to factor in all the different entities that might be subject to that rule in itself can be an extremely complicated process.

So we keep trying to develop better tools, and we learn from you. So thank you very much.

I'm going to suggest that we take a break, so that we can have the group that was here now get a chance to say goodbye and maybe even take a photo, if we have

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1 anybody present who wants to do that. And then we can reassemble after maybe a 10 minute break or so and take up 2 3 the scoping plan. 4 (Off record: 10:21 a.m.) 5 (Thereupon a recess was taken.) 6 (On record: 10:38 a.m.) 7 CHAIR NICHOLS: Come back to order. 8 CHAIR NICHOLS: I need my gavel. Ladies and 9 gentlemen. Could I get people in the back to sit down. 10 Helping you're going to join us. 11 We've been joined by our newest Board member. 12 if you want to be present for a historic occasion, come on in. Sit down. 13 Sit down. I see you, Stephanie. 14 15 All right. We have our EJAC representatives 16 here. We have our staff here. Where is Mr. Corey? 17 Is he here? 18 He will be. 19 We have a microphone. We have a microphone, and 20 it works. That's great. Well, I think we should give one 21 to Senator Lara. 22 Ladies and gentlemen, as I think everybody know 23 who follows the Air Resources Board, last year the 24 Governor signed legislation, 2 bills that were joined

together, SB 32 and AB 197. And they created 2 new

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positions on the Air Resources Board for members of the legislature, one from the Assembly and one from the Senate, who would serve as ex officio members of the Board.
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We got the word yesterday that the Senate had made its appointment. And he is here today, and he is a very good friend of the Air Resources Board, and a author of some significant air quality and climate legislation over the last couple of years, and that is Senator Ricardo Lara.

But before he's allowed to do anything, he has to take an oath of office, because we all do. It's the same oath that the Governor takes, that legislators take, and Air Board members take too

So without further ado, I will ask you to please raise your right hand, and repeat after me, "I, Ricardo, Lara" --

SENATOR LARA: I, Ricardo Lara --

CHAIR NICHOLS: -- "Do solemnly swear" --

SENATOR LARA: -- do solemnly swear --

21 CHAIR NICHOLS: -- "that I will support and

22 defend" --

23 SENATOR LARA: -- that I will support and

24 defend --

25 CHAIR NICHOLS: -- "the Constitution of the

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1
   United States" --
             SENATOR LARA: -- the Constitution of the United
 2
3
    States --
 4
             CHAIR NICHOLS: -- "And that Constitution of the
    State of California" --
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             SENATOR LARA: -- and the Constitution of the
7
   State of California --
8
             CHAIR NICHOLS: -- "against all enemies foreign
9
   and domestic; " --
10
             SENATOR LARA: -- against all enemies foreign and
11
   domestic --
             CHAIR NICHOLS: -- "that I will bear true faith
12
13
   and allegiance" --
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             SENATOR LARA: -- that I will bear true faith and
15
   allegiance --
16
             CHAIR NICHOLS: -- "to the Constitution of the
17
   United States" --
18
             SENATOR LARA: -- to the Constitution of the
19
   United States --
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             CHAIR NICHOLS: -- "and the Constitution of the
   State of California; " --
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22
             SENATOR LARA: -- and the Constitution of the
23
    State of California --
24
             CHAIR NICHOLS: -- "that I take this obligation
25
   freely" --
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SENATOR LARA: -- I take this obligation
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2
    freely --
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             NICHOLS: -- "without any mental reservation" --
 4
             SENATOR LARA: -- without any mental
5
   reservation --
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             CHAIR NICHOLS: -- "or purpose of evasion" --
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             SENATOR LARA: -- or purpose of evasion --
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             CHAIR NICHOLS: -- "and that I will well and
9
   faithfully discharge" --
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             SENATOR LARA: -- and that I will well and
11
    faithfully discharge --
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             CHAIR NICHOLS: -- "the duties upon which I'm
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   about to enter".
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             SENATOR LARA: -- the duties upon which I'm about
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   to enter.
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             Got it.
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             (Laughter.)
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             CHAIR NICHOLS: Thank you. And welcome to the
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   Air Resources Board.
20
             SENATOR LARA:
                           Thank you.
21
             (Applause.)
22
             CHAIR NICHOLS: All right. Our new Board member
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    is going to be seated with us.
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             BOARD MEMBER GIOIA: Can I just note, and there's
   been a few of us here who had a chance to go through
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confirmation hearings when you were on -- with your role on the rules Committee a few years ago.

So thank you for that.

SENATOR LARA: Thank you.

(Laughter.)

SENATOR LARA: I think I did well. I think I picked some good folks.

CHAIR NICHOLS: You made the right decision.

(Laughter.)

CHAIR NICHOLS: Would you like to make any opening remarks?

SENATOR LARA: Thank you. Thank you, Mary, and thank you to the Board. It's great to be here, you know, to be part of such an illustrious group and such a great group of staff, that, you know, now more than ever it's important for us to continue to lead the rest of the world when it comes to our progressive environmental policies, and ensuring we protect our most vulnerable, and that we protect our beautiful State of California. And I'm blessed to be part of such a distinguished group with fellow colleagues of mine, in particular Hector De La Torre, who we used to represent the same area, who really well understands the need for us to continue to fight for air quality.

And, of course, Senator Dean Florez passionate

advocate for our Central Valley. You know, for me, it's such an honor to be part of the ARB now, to be able to lend yet another voice to those who may not feel they have a voice in our government, and to continue to fight for those most vulnerable communities. I was -- you know, I was raised in East Los Angeles, California, right next to Vernon.

My playground was the railyards and the parking lots of many of those companies, because we didn't have appropriate park space. And sometimes we shut down the street illegally to play ball.

(Laughter.)

SENATOR LARA: But those are the times of yesteryear. Now, I'm glad to see that we continue to improve the conditions of life for our most vulnerable. So I look forward to having -- having those discussions. And again, what we were able to accomplish through our Short-Lived Climate Pollutant Plan, which Mary and I got together in Paris. And I said I'm going to get this done, one way or another.

And now we have the strongest targets in the world to address what essentially is the next big fight for us, is, you know, methane gases and black carbon.

And so I look forward to continuing having those discussions, and look forward to being part of such a --

such a great group.

Thank you.

CHAIR NICHOLS: Thank you. Welcome aboard.

Your timing was perfect, because we were just about to begin the second of three hearings on the scoping plan for meeting the 2030 targets.

So I'm just going to make a couple of very brief owning remarks, and then we'll get right into the staff presentation.

The proposed plan was first presented to the Board at the January Board meeting of this year. At that meeting, the Board provided direction to the staff on some additional analyses, and requested an opportunity to have a joint meeting with the members of the Justice Advisory Committee.

We held that meeting yesterday afternoon, so that the Board members and the EJAC members could have a more in-depth conversation. I think it was a very good conversation. And although I certainly can't speak for everyone there, I feel like I personally have a better understanding of the Committee's concerns and its history and deliberations.

And I learned some things which I have reflected on. One of the things that came up yesterday, and that has come up in the EJAC's earlier remarks to the Board, is

the desire of the Committee and some of our own Board members - and I want to particularly thank Diane Takvorian for having so articulately presented this - for more time to comment on and consider the scoping plan.

Now, that the draft is out, I know that the Committee is working hard to wade through the document, and that they're also planning a series of community meetings in March. After the discussion yesterday, as well as thinking further on this and pressing the limits that we have from a legal perspective, I am convinced that we can improve the process by providing more time for input, public discussion, and analysis.

So I am directing the staff to delay the Board's consideration of the scoping plan until June of this year, which means that the Board will also have to delay consideration of the amendments to the Cap-and-Trade Regulation until June as well. I think that will provide more time for all of us to look at the analyses that the staff are working on, as well as provide comments, and for the staff to reflect those comments in the final draft that the Board would act on.

So I think that's a good segue in today's -- into today's staff presentation. Today the staff is going to be providing an update on the progress that they've made in directing -- in addressing our direction from January,

as well as the stakeholder comments that we heard at the January Board meeting and at a recent workshop.

In addition, OEHHA is here with us to provide a summary of their recently released report. So with that, Mr. Corey, would you please introduce this item?

EXECUTIVE OFFICER COREY: Yes. Thanks, Chair Nichols.

As you mentioned, this is the next step in the process to develop California's plan to meet the 2030 GHG target. Today, we're providing the Board with an update on progress staff has made on the scoping plan in response to Board direction provided at the January Board hearing, and comments provided by stakeholders.

Since this is the second of three Board hearings on the scoping plan, today's Board hearing provides stakeholders an opportunity to provide additional comments prior to the development of the final plan. I'm also pleased to welcome Lauren Zeise and John Faust from OEHHA, who have joined us to provide a summary of their report and answer any questions you may have.

Based on the process we're going through, we're confident that the final plan we bring to the Board to consider in June will help California achieve its climate goals, protect public health, especially in vulnerable communities, and support the transition to a sustainable,

low carbon economy.

And with that, I'll now ask Emily Wimberger to give the staff presentation.

Emily.

(Thereupon an overhead presentation was presented as follows.)

CHIEF ECONOMIST WIMBERGER: Thank you, Mr. Corey. Good morning, Chair Nichols, all members of the Board, new member of the Board.

Today, I'll provide a report on the scoping plan process that has taken place since the January 27th Board hearing. Today is the second of three Board hearings for the scoping plan. The first Board hearing occurred in January, and the third Board hearing will occur later this year.

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CHIEF ECONOMIST WIMBERGER: Today's Board presentation includes background on the 2017 scoping plan update, including the objectives that guide the proposed plan. Then I will focus on the progress that has been made since the proposed plan was presented to the Board in January, including the release of the initial AB 32 implementation report issued February 2nd by OEHHA.

I will then outline refinements being made to the scoping plan draft released in January. These refinements

include the presentation of supplemental information and additional analyses in response to Board member and stakeholder feedback.

The presentation will conclude with a schedule for developing the final scoping plan.

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CHIEF ECONOMIST WIMBERGER: Today, I will begin with a reminder of the background for the scoping plan. The proposed plan released in January describes how the State will reduce greenhouse gas emissions by 40 percent below 1990 levels by 2030. The most ambitious target in North America.

The plan builds on the State's successful efforts to reduce greenhouse gas, criteria and toxics emissions, and work done in previous scoping plans. And the target is consistent with global consensus about how much we need to reduce greenhouse gases to avoid the most harmful impacts of climate change.

In California, our greenhouse gas emissions have declined due to the successful design and implementation of many policies and programs. The proposed plan describes how these programs can continue to play an important role in achieving the 2030 target. In particular, the proposed suite of policies provides the most certainty in achieving the State's 2030 target, and

promotes technology, energy, and economic transformation that will make our communities and economy more resilient and equitable at the same time.

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CHIEF ECONOMIST WIMBERGER: This slide lists some key objectives to achieve the 2030 limit. A primary goal of the scoping plan is to achieve the 2030 limit and put us on the path to achieving the long-term 2050 limit of an 80 percent reduction below 1990 levels. We believe the proposed plan includes features that provide the highest certainty that we can achieve this target.

We want to provide direct greenhouse gas emissions reductions in largest economic sectors to ensure our economy is transitioning to more sustainable production and energy.

The plan should also minimize emissions leakage and ensure any reductions in California are not just a result of relocation of those sources, or production out of State, which in some situations could actually lead to an increase in greenhouse gas emissions.

This scoping plan must include a mechanism to support climate investments for programs in disadvantaged communities to ensure these communities can benefit from clean technology, fuels, and become more resilient in the face of climate change. To date, approximately

\$470,000,000 from cap-and-trade auction proceeds are being used for projects to benefit disadvantaged communities.

We must also leverage the plan to provide air quality co-benefits to protect public health. The final plan should also be cost effective, and provide compliance flexibility, so that the economy can grow and support a robust workforce while still reducing emissions.

Importantly, we want to make sure we are able to work at subnational and national levels to ensure greater greenhouse gas reductions through mutual collaboration.

Our Cap-and-Trade Program is currently linked with

Quebec's program, and proposed to be linked with Ontario's program. It is also desirable to have a scoping plan that readily meets the mandates in the U.S. EPA's Clean Power Plan.

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CHIEF ECONOMIST WIMBERGER: This slide outlines public meetings and reports that have been released in the weeks since the January Board hearing. On February 2nd, OEHHA released an initial report titled, "Tracking and Evaluation of Benefits and Impacts of Greenhouse Gas Limits in Disadvantaged Communities". The report was prepared in response to a December 2015 directive issued by the Governor to analyze possible benefits and impacts to communities identified as disadvantaged under SB 535

from the greenhouse gas emissions limit adopted by ARB.

These benefits and impacts could include changes in emissions of GHGs, toxic air contaminants, and criteria air pollutants. This report will be discussed in greater detail in the next slides.

There have also been numerous opportunities for public engagement. On February 9th, ARB held a public scoping plan workshop, which included a discussion of planned revisions and supplemental analyses for the final plan. There has also been a meeting of the Environmental Justice Advisory Committee this week on February 14th and 15th, as well as the joint public discussion between the EJAC and the ARB Board, which occurred yesterday.

I will now ask Lauren Zeise from OEHHA to provide a summary of the AB 32 implementation report released on February 2nd. The report focuses on large stationary greenhouse gas emitters in California.

Lauren.

OEHHA DIRECTOR ZEISE: Good morning.

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OEHHA DIRECTOR ZEISE: John Faust and I will give you a very brief overview of our report. This report is the first in a series of reports that we're preparing to look at the possible effects of the State's climate change programs on disadvantaged communities.

So the reports are intended to address concerns that regulatory programs aimed at reducing emissions of greenhouse gases may have unintended effects of increasing other air pollution, like toxic air contaminants, in environmental justice communities or leaving communities behind if there are broad reductions, but they're occurring elsewhere.

Of course, climate change programs also have the potential to reduce emissions of both greenhouse gases and conventional air pollutants in disadvantaged communities.

So the slide shows the Governor's directive. The report that you have was prepared in response to this directive that was issued by Governor Brown a little over a year ago. The directive asked for a series of reports to look at the benefits and impacts of the greenhouse gas limits in disadvantaged communities.

OEHHA is to look at emissions of a variety of air pollutants, including greenhouse gases, criteria air pollutants, toxic air contaminants, as well as public health and other environmental health exposure indicators related to air pollutants in disadvantaged communities.

So I'd like to start by saying that this initial analysis does not make conclusions regarding benefits or impacts in communities resulting from any climate change program.

Our analysis is a first look at the types of data that are available for greenhouse gas facilities, the proximity of emitting facilities to disadvantaged communities, and how greenhouse gas emissions relate to other air pollutants.

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OEHHA DIRECTOR ZEISE: So our first report focuses on industrial facilities and other sources that emit greenhouse gases and are regulated under ARB's Cap-and-Trade Program. It emphasizes releases of air pollutants from large emitting facilities.

One of the objectives was to look at whether these facilities tend to be differentially located in disadvantaged communities. These communities -- the communities we looked at were the ones identified by CalEPA in 2014 based on their pollutant burdens and population vulnerabilities, such as poverty, using our CalEnviroScreen tool.

The top 25 percent of California's approximately 8,000 census tracts rated by CalEnviroScreen were identified as disadvantaged by CalEPA. Another objective was to look at how facility's emissions of greenhouse gases, like carbon dioxide, may relate to emissions of other pollutants, specifically the criteria and toxic air

pollutants for major cap-and-trade facilities.

Here, we made use of data from both ARB and the U.S. Environmental Protection Agency. We also developed a couple of case studies looking at trends in emissions for cement plants and refineries.

Our -- again, our initial work is limited. Much of it relies on data we were able to obtain regarding emissions of air toxics for a single year 2014. We intend to continue gathering information on emissions from these facilities to more fully examine trends. We also intend to look at other AB 32 programs where there are potential benefits and impacts to disadvantaged communities.

Next slide.

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OEHHA DIRECTOR ZEISE: Overall, our report makes several findings. Major industrial facilities regulated under the Cap-and-Trade Program are more likely to be located in or near disadvantaged communities.

Second, emissions of greenhouse gases from major cap-and-trade facilities were moderately correlated with emissions of particulate pollution, PM2.5, as well as other criteria air pollutants and toxic emissions.

Correlations varied among different kinds of facilities. Refineries, for example, showed the strongest correlation between greenhouse gases and toxic

co-pollutants, and cement plants showed moderate correlations.

2.4

Regarding our case studies of refineries and cement plants, we saw variations among indus -- individual facilities, and the correlations between greenhouse gases and criteria and toxic co-pollutants.

These case studies illustrate that the relationship between greenhouse gases and other pollutant emissions is complex. Knowing the changes in greenhouse gas emissions at a particular facility doesn't tell you exactly what the changes in toxic air contaminant or criteria air pollutant emissions have occurred.

Nonetheless, OEHHA's analysis suggests that reductions in greenhouse gas emissions from large greenhouse gas emitting facilities are likely to result in varying amounts of lower emissions and exposures to other pollutants in and around communities located near such facilities.

However, again, this is based on limited data and investigation. There's a need for additional investigation into the factors that drive emissions changes, and what future greenhouse gas reductions may mean for changes in emissions of toxic pollutants.

Data on greenhouse gases in air toxics are collected by different agencies, and other programs

operating under different reporting requirements. These regulatory programs were established over time by different legislative mandate. This complicates data acquisition and complicates data interpretation.

Co-reporting of high quality data on criteria, air toxic, and greenhouse gas emissions for facilities subject to the Cap-and-Trade Program would substantially aid the investigation of emissions impacts.

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OEHHA DIRECTOR ZEISE: So as I mentioned, this is a first report. OEHHA will continue to acquire and analyze data for future reports, which will build on this report's initial work.

The Cap-and-Trade Program is still relatively new. And as the program continues to generate data over the next several years, it should become easier to detect and evaluate trends in emissions.

In future reports, OEHHA also plans to expand its analysis to cover other climate change programs in addition to the cap and trade, and include an analysis of the benefits and impacts arising from investment of Greenhouse Gas Reduction Funds.

CHIEF ECONOMIST WIMBERGER: Thanks, Lauren.

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CHIEF ECONOMIST WIMBERGER: Now, I will discuss the refinements to the scoping plan that are underway in preparation for the release of the final plan. The proposed plan posted for comment on January 20th includes all the analyses and appendices to support the choice of ARB's preferred scenario.

Refinements to the proposed plan will provide more information to compare all alternatives presented in the proposed plan, and include refinements to the economic appendix as outlined in the January draft of the proposed plan.

These refinements include an analysis of the regional impacts of the proposed plan, and all alternatives, as well as additional sensitivity analysis related to uncertainty and abatement from greenhouse gas reduction measures and costs.

These refinements are being incorporated into the economic analysis in response to stakeholder comments, including those received from the EJAC committee and the economic reviewers to the scoping plan.

The refinements also include a supplemental health analysis as proposed by Supervisor Gioia at the January Board hearing. I will provide additional detail on the methodology for this supplemental analysis in a few moments.

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CHIEF ECONOMIST WIMBERGER: Refinements are also being made in the presentation of material across the proposed plan and 4 alternatives. The final plan will include the same level of detail in the description and modeling for the proposed scenario and all alternatives.

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CHIEF ECONOMIST WIMBERGER: This slide presents an outline of the additional detail that will be incorporated into the scoping plan in regards to the cap-and-tax alternative. The draft plan released on January 20th, included a description of the cap-and-tax alternative, but there was a request for staff to provide greater detail on this alternative.

Staff has evaluated a cap-and-tax option as an alternative to a post-2020 Cap-and-Trade Regulation, as part of a suite of measures to achiever the 2030 statewide emissions target.

Similar to a post-2020 Cap-and-Trade Program, the cap-and-tax alternative would be put in place to achieve the emissions reductions needed to close the gap between the known commitments and the 2030 target. Each entity covered by the cap-and-tax alternative would be subject to an individual annual cap on emissions that would decline each year by 4 and a half percent.

This declining cap would cover all sectors, including industry, transportation, energy, agriculture, recycling and waste, high GWP gases, and residential and commercial, not just those entities currently covered by the Cap-and-Trade Program.

Each metric ton of greenhouse gas emissions would also be subject to a tax set at the social cost of carbon, approximately \$50 in 2030. Additional penalties would be assessed for emissions above an entity's individual cap. For example, an entity may be assessed a penalty of 3 times the tax rate for emissions above its cap.

Under this alternative, there is no trading among entities and there's no use of offset credits. Thus, entities covered by the cap-and-tax program would need to reduce on-site emissions, and utilities and fuel suppliers would need to reduce emissions for delivered energy and fuels in order to meet the annually declining entity emissions caps.

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CHIEF ECONOMIST WIMBERGER: This slide outlines some additional details within the cap-and-tax alternative. ARB is considering using the social cost of carbon for the tax, similar to the carbon tax alternative. Within the cap-and-tax alternative, it is the declining cap that will set the level of emissions, not the tax,

which will act as revenue generator that can be used to further greenhouse gas reductions, provide a dividend to California households or other uses.

2.4

Under the cap-and-tax alternative, additional program design details, including the growth of production at facilities and the entry of new industry into California would need to be addressed prior to adoption and implementation.

Additional work would also be needed to establish a base reference year and annual caps for each entity in California. We would not want to set up a process that incentivizes increases in emissions if future years were to be used as the basis for declining emissions caps.

ARB does not believe that every sector will be able to achieve the 4 and a half percent annual reduction required to meet the 2030 target under the cap-and-tax alternative.

The cap-and-tax alternative is expected to have the highest cost to the California economy of all the analyzed alternatives. This can translate into significant reductions in the State economy, loss of industry, and loss of employment as entities in California reduce production or move out of State.

The potential for emissions and economical leakage is high under the cap-and-tax alternative, while

there's no opportunity for linkage of a cap-and-tax program with other jurisdictions.

Additional detail on the impacts and the economic modeling of the cap-and-tax alternative will be presented in the March scoping plan workshop, as well as in the final plan.

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refinements being made to the economic analysis of the proposed plan. As outlined in the January draft, ARB is continuing to refine the economic analysis in response to stakeholder comments. These refinements include analyzing the impact of the proposed plan and alternatives by region, including an estimation of the impact on disadvantaged communities as identified by CalEnviroScreen 2.0.

This additional work is in response to stakeholder feedback asking for additional granularity in the economic analysis. The planned refinements also include sensitivity analysis to analyze the impact of uncertainty and varying ranges of greenhouse gas abatement and costs across the proposed plan and alternatives.

ARB is also making refinements to the modeling across all scenarios, including updating cost information in response to stakeholder feedback. Modeling results for

the proposed plan and all alternatives will be presented with a uniform level of detail for the final plan. This additional detail will allow for easy comparison across all the alternatives.

In response to stakeholder and Board member comment at the January Board hearing, the refinements also include a supplemental analysis incorporating estimated avoided health impacts from the proposed plan and alternatives into the economic analysis. Relying on health experts, researchers, and established methodological techniques, ARB is working to quantify and monetize the avoided health impacts that are projected to result for the proposed scenario and the alternatives.

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CHIEF ECONOMIST WIMBERGER: This slide provides additional detail on the framework used to estimate the health impacts associated with the proposed plan and alternatives. Some actions that reduce GHG emissions can also lead to reductions in ozone and PM2.5 precursors, and toxic air contaminants. Reductions in these non-GHG emissions can reduce adverse health impacts and reduce cancer risk in California.

Actions that result in GHG reductions in the transportation sector can also lead to significant health benefits by promoting active transportation, as well as

improving air quality.

ARB will be utilizing some of the AB 197 analyses to quantify the health benefits of the proposed plan and the alternatives. We will need to make assumptions about how reductions in GHGs may relate to toxic and criteria pollutant reductions. All of those assumptions are already caveated in the proposed plan.

Reductions in criteria and toxics can be translated into health risks. This process is similar to how ARB has quantified health impacts of other plans and measures.

For active transportation, staff presented the proposed methodology for how to quantify the health impacts at the February 9th workshop and is seeking comments on this methodology.

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CHIEF ECONOMIST WIMBERGER: Regarding next steps and the schedule going forward, the original schedule is outlined on this slide, although that is now outdated, given Chair Nichols' remarks.

(Laughter.)

CHIEF ECONOMIST WIMBERGER: Staff will work to modify the original schedule, and make these details available to the public as soon as possible. We will hold at least one additional workshop that will outline --

we'll both take comments on the proposed plan, as well as the refinements to the proposed plan, and we will continue to support the EJAC as they meet and have community meetings throughout the State.

This concludes my presentation. I would now like to invite members of the EJAC to the podium for comment.

EJAC MEMBER VALENZUELA GARCIA: Good morning. Long time, no see.

(Laughter.)

EJAC MEMBER VALENZUELA GARCIA: I think it's been about what 12 hours since we last saw each other.

Thank you for time on today's agenda. My name is Katie Valenzuela Garcia. I am one of the provide co-chairs of the Environmental Justice Advisory Committee joined today by Mayor León from the City of Huron, who will speak after me, and also joined by our colleagues Eleanor Torres and Luis Olmedo in the back from Brawley.

First, I just want to thank you all again for what was, we think, a historic meeting yesterday of the full Air Resources Board and the Environmental Justice Advisory Committee. We were excited that we got to start some really important conversations. One of those conversations was around the need for a just transition for workers.

As Emily just noted, we all are -- we are all

worried about the potential for job loss in our communities as industry starts to do more direct emissions reductions. So our ability to understand what those clean, green, living-wage jobs will look like, so we can start investing in those training and resources for those workers is really exciting and a conversation we're looking forward to continue with you all.

We also talked a lot about -- about getting a better understanding of public health impacts of this plan, of all of the scenarios of this plan, and really encouraging staff to continue the work that started to figure out how we can better quantify the cost from a public health perspective, as well as an economic perspective in all of the decisions that we're trying to make.

And finally, how to include data like the OEHHA report that was recently completed, the Cushing Report that came out in September, so we make sure that the scoping plan is based on the fullest range of data that's available to us before it's adopted.

So we are incredibly grateful that you've given us some more time. One of the things that we've talked about a lot is the need for a thorough analysis of our recommendations that have been completed to date, because we did discuss how there -- more conversation about things

that can be in the scoping plan, but there's also some things that are outside of the scoping plan, and might require ARB's commitment to work with other agencies, as well as our legislative allies to figure out how we can make sure our communities have what they need as California moves towards these ambitious targets.

So we're looking forward to seeing that full analysis, and we'd like to reiterate our idea to continue having these joint meetings, hopefully in April, since we'll have another round of recommendations to you at the end of March, after we complete another round of robust community meetings that you are welcome to attend, so that we can continue the discussion and start honing in on areas of agreement and areas of need for further discussion.

Thank you.

EJAC MEMBER LEÓN: Buenas Tardes. Good afternoon, or is it still morning. Buenos días in that case.

My name is Ray León, founder and executive director of the Latino Environmental Advancement and Policy Project, very long. We just say LEAP, Valley LEAP, in the San Joaquin Valley.

And just recently, as you just heard, elected as Mayor of my home town in the City of Huron. I'm very

proud that. Huron is a farmworker community on the west side of the valley, near the 5. Very detached from the county resources, and so in -- and one of the poorest, I think the poorest, cities in the State of California.

And I'm very proud of participating in the EJAC, but also proud of being of California -- proud of being from California, you know, partially because of the leadership that we have here. You know, I appreciate all of you at the Air Resources Board. I think your leadership and the staff as well has been instrumental. And, of course, the leadership of the legislature, I think we're showing the way to the country, right? And not just in terms of greenhouse gases, but in other matters, which I'm, you know, proud to say, you know, I was born and raised in California.

But, you know, in regards to the auction funds and the investments, I think there's still some gaps in rural San Joaquin Valley and other similar regions. I have my good friend and ally here from the Coachella Imperial valleys, farmworker regions as well. I think we need to pay a little bit more attention there. And Dean knows about that as well.

But I'd like to, you know, share my appreciation that I think there's been some un-siloing, you know, within the agencies, at least under CalEPA, the BDOs, you

know. I think we've still got some work to do there, but,
you know, we're working towards it, right?

Not overnight. I think part of it is just building the relationship, that trust, that amistad, and really working together to develop the best and ideal, you know, process for all of our folks here in the State.

I also -- I would like to recommend that we start lassoing in this innovative spirit for sustainability to other State institutions. You know, on the way up here I was thinking, and I've got friends that are teachers and Presidents of the California Community Colleges, and I had a conversation with them on the road up from Huron, regarding -- hey, you know, I was telling them you guys are training truck drivers and other things that aren't directly, you know, related to the clean energy plaza we intend to build.

You know, and I would like my families in the future to say, yeah, my tio helped build that, my grandfather helped build that. You know, it makes it more intimate, you know, a solution for greenhouse gases, but that also helps reflect and empower a culture of sustainable living, right?

And when you're able to say, yeah, may tio, you know, that's -- that creates something very strong, cultural. And so not only are we developing these things,

but we're making them to where they are also bolstering or -- is that the right term? -- the culture to continue with that sort of work.

And, you know, just thinking about that in regards to -- we have a struggle for high school right now in my home town, you know, in the schools -- the public schools, they should be learning about this. I don't know if it's in the curriculum yet, but, you know, our innovation is something to applaud, and it's recognized worldwide.

So our children should know about it to be proud of it and have that morale to continue and be not just the manufacturers, but the engineers. And that's what I'd like to see from my home town of Huron. But, you know, we're number one and we'll continue to be number one under the free energy sun.

(Spoke in spanish) Thank you.

EJAC MEMBER OLMEDO: Good morning. Thank you,
Chairman Nichols for your leadership in leading us from
policy into actions into hopefully transformational
impacts on disadvantaged communities. I also want to
congratulate Senator Lara for your appointment and the 2
other seats, environmental justice, Diane Takvorian and
Board member Senator Florez. I think it's historic.

I do have an ask. I'm very supportive of my

colleague's comments. I'm won't repeat them. But I do want to reinforce the fact that I think it was another historic moment yesterday when we met, both the Environmental Justice Advisory Committee, the Air Resources Board. I'd like to ask that we continue those meetings, whether they're quarterly, or whether they're biannual. I'm not sure how feasible or how frequent we can have those meetings, but I'd like to make that recommendation.

There's a lot of discussion also in terms of measurements in terms of metrics. And I'm also very pleased with the way the discussion from the executive, to the staff, to the Board of -- and other academic institutions, such as those that were convened by USC[sic] President Janet Napolitano who have really taken very serious the discussion of community monitoring. We've seen it very effectively implemented in emergencies like Aliso Canyon. We'd like to see it continue in disadvantaged communities, and hopefully measure what the impacts of disadvantaged -- of investments will be moving forward into the -- now and into the future.

We need those data. We need the data gaps. Very clearly today, OEHHA, the Director and staff, have -- John had brought that to your attention. I read that in their report. There's a lot of data gaps. And hopefully,

through this community monitoring, or other types of data acquisition instruments, we can fill in those data gaps and have a better picture of how to move forward.

Thank you very much. Appreciate it.

CHAIR NICHOLS: Thank you. Thank you, all.

All right. We also have about 20 witnesses who have signed up to speak on this item. And we are going to be imposing our usual 3 minute time limit on the speakers. So we also are using both of the podiums. They both have live mics on them. So if you could be ready and come on down before your time to actually speak, that would be much appreciated.

We're starting off this morning with an ARB alumnus. Now, the head of the Placer County Air Pollution Control District, Erik White.

MR. WHITE: This is -- this is a little different for me, but good morning, Madam Chairman and members of the Board.

(Laughter.)

2.4

MR. WHITE: My name is Erik White, and I'm the Director of air pollution in Placer County. So no, I am not here to talk about the Truck and Bus Rule this morning.

(Laughter.)

MR. WHITE: The last time I was here, it was --

it was to say so long to many old friends. And so it's great to be here again today to see so many familiar faces and friends, and welcome new members to the Board, including Senator Lara.

It's been great. I want to just emphasize that as we've worked with staff, and we really appreciate the coordination and cooperation of staff with the air districts on the development of, not just the scoping plan, but the various other elements of the State's climate strategy.

It's very important, as we think about how the State is going to meet those strategies, to recognize that it is a multi-pronged stool. So as we think about whether it's the scoping plan the Short-Lived Climate Pollutant Plan, the climate investments, the Forest Carbon Action Plan, that, as was mentioned in the previous presentation, we not think about these things in a silo. We have to recognize that while one might focus on a particular aspect of the plan, all of them interrelate to how the State and local agencies are going to meet those targets.

So I have a few specific comments I want to make. And I think really the best example of that interrelations when we think about wildfires. A single wildfire can wipe out all of the benefits that we see from our anthropogenic black carbon strategies that we have.

And it also represents 80 percent of the carbon emissions from working lands. So recognizing black carbon, carbon, and the need to -- for forest resiliency is very important as we move forward.

Focusing on the scoping plan itself, a couple of comments that the staff of the Air District would like to make. And first is that it's going to be very important we think to increase the information about black carbon and carbon sequestration in forests and working lands, and to more aggressively encourage research and identify strategies to reduce the carbon, black carbon impacts from those sources.

There is a number of efforts underway to better help our understanding of emission inventories, carbon sinks, carbon inventories in the forests, but we think there's information now that the plan could start to move forward with recommendations as to how to start to address those[sic] information. We don't need perfect at the expense of good, and we should begin progress now in making -- making those projects -- making those efforts, especially as we recognize that there's over 100,000,000 dead and dying trees in California. And despite the recent rains, those numbers are going to increase until the situation stabilizes in our forests.

A couple of actions that we think would be ideal

for inclusion certainly could be the development of liquid biofuels from -- in support of Low Carbon Fuel Standard from woody biomass, recognizing and supporting the important role of biomass energy, as we think about the renewable -- renewable portfolio standard, and recognizing that a -- that was a quick 3 minutes.

(Laughter.)

MR. WHITE: -- that black carbon.

CHAIR NICHOLS: That's right.

MR. WHITE: It is -- that black carbon emissions can be reduced by 98 percent as we think about outlets through fixed facilities.

So again, thank you for the opportunity to testify and look forward to working with staff in the future.

CHAIR NICHOLS: Thank you.

Tiffany

MS. ROBERTS: Good morning, Madam Chair and members of the Board. Thank you for the opportunity to speak today. We understand that the task ahead of you is a daunting one. It's going to be tough to balance your current program with the requirements of 197. So we don't envy you.

And I think conversations like yesterday's are really important in working through a lot of the issues

that we have before us. You put in a significant amount of time yesterday. And the conversation was striking, particularly in regards to jobs, and those jobs specifically in the fossil fuel industry.

Much of that conversation was consistent with ARB's analysis, the economic analysis. It's Appendix E, page 23. I think it's important for all of us to look at that page, because that page indicates what the potential job loss is of this plan. And we're talking anywhere from 62,000 to 99,000 jobs. So there does seem to be, at least an acknowledgment, that many of these jobs will be coming from the fossil fuel industry.

And you've heard from lots of folks on the issue, but I think today what we wanted to be able to do is to present a little bit of the other side of the story. So as you folks hear from folks in the industry, as they come to you today, and they speak, and they share their story, we just ask that you keep a couple of things in mind.

The first thing is the comment that was made yesterday during the workshop. There was someone who mentioned the fact that we need a better sense of the overall mapping of where green jobs are. It seems like there's some anecdotal evidence, some snapshots of where those jobs are, but we don't really have a comprehensive view of where those jobs are.

And so without that -- without that, what we potentially risk is dislocation of workers, of families. And so we'd ask you to keep that in mind. And then the other thing that we would ask you to keep in mind is that there is another way. Cap and trade will directly reduce greenhouse gas emissions, and could potentially allow us to save some of the jobs.

So I know staff has worked, they did the all cap-and-trade analysis. We'd continue to ask to have the results of that analysis released, again so that public policymakers, yourselves included, have the opportunity to kind of deliberate over those numbers, especially when we're talking about the numbers in terms of jobs that are at stake. So again, thank for the opportunity to speak today.

CHAIR NICHOLS: Good.

MS. MARTINEZ: Hi. I'm Deanna Martinez. I work at Shell Oil. And I can tell you first hand that I grew up in the industry. My father, my grandfathers, my cousins, my uncles, I mean, I grew up going to visit them at work at Chevron. So I -- my children work in the refinery, so I feel it's a safe environment.

I started out as a pipefitter, now I work in operations, and health and safety, so I get to see a little bit of everything. When I got hired in 2013, I was

working on a project that was -- for the green -- sorry, greenhouse emissions reduction. And I -- I like to say that they're doing a lot of things to reduce the -- you know, the emissions.

And if you guys would -- I'm opposed to the reduct -- the 20 -- sorry. I'm not -- I'm new to this kind of stuff -- the 2030 change. And I think it's what -- the policy that they have now is effective and are they're making the right changes.

Thank you.

CHAIR NICHOLS: Thank you.

MR. ENGLAND: Hello, Board members. My name is Don England. And I'm an analyzer technician at the Tesoro Refinery. I've worked in the -- as a analyzer technician in the continuous emission monitoring for approximately 25 years. I work -- I've worked in the refinery and power generation for 25 years. I can tell you that we, in the industry, have done a tremendous amount of work over the years installing state-of-the-art equipment and process upgrades that have dramatically reduced emissions.

As a result, California has some of the most efficient facilities in the world. And I'm proud that I could be a part of the tremendous change.

When I heard that our State legislature is considering requiring all refinery facilities to come up

with the same level of efficiency, as the most efficient facility in the State, this concerns me, not because we don't want to be a conscientious contributor to cleaner air, but because of the way individual refineries are designed and built. It is not as straightforward as you might think.

We don't fault anyone for not understanding that, but it seems as though some people probably don't understand how different facilities are built, and how they work. It is important before arbitrarily targeting facilities to meet a single standard that each of you have a better understanding of how each facility works before making such broad changes.

Refineries especially differ vastly from one another. And it is not possible for every refinery to achieve the same efficiency. In fact, refineries are designed to run at optimal levels. These levels vary -- these levels differ based on the design of a facility. If a refinery is forced to run for extended periods of time at levels other than their designed optimal level, emissions will actually result in higher greenhouse gas emissions per barrel produced. This will result in the opposite effect of what this regulation is intending.

I was glad to hear the recommendation to push the vote to June. I think it is important that more time is

spent together talking through the technical side of what is being suggested in the refinery measure before it is included in this blueprint document. I believe the State wants to make sure that this plan is as well vetted as possible. And as a refinery community, I know we would welcome the opportunity to share the more technical aspects of this, so better informed decisions can be made.

I appreciate your time. Thank you.

CHAIR NICHOLS: Thank you.

BOARD MEMBER GIOIA: And, Madam Chair, can I make just one brief comment. Over here. I'm over here.

CHAIR NICHOLS: Oh, excuse me. Sorry.

(Laughter.)

BOARD MEMBER GIOIA: Over here.

So I just wanted to say, I know there was a reference to air district engineers not understanding refineries. The air district engineers, who are among the same group of engineers who discovered and caught Volkswagen cheating on its emission control, are highly trained engineers who understand refinery operations, and are working with the facilities in addition.

So I just wanted -- I think it's important to note, because there's word that goes out that the engineers at the air district don't understand refineries. These are some of the most qualified engineers who

understand these -- who are again -- whose colleagues discovered the emission control violations at Volkswagen, which has resulted in billions of dollars to the State. So I just wanted to acknowledge that.

CHAIR NICHOLS: Okay. Thank you.

Mr. Cruz.

MR. CRUZ: Good morning. My name is Patrick

Cruz. I am a process operator -- I'm a process operator

employed by Tesoro Martinez Refinery. I've been a

operator for 9 years. I actually went through the Process

Technology Program in the local community college. And I

thought it was a good opportunity to be able to contribute

to our economy, and have a job that I thought was future

proof.

I'm here in spite of the fact that public speaking is not strong suit. I'm actually terrified right thousand, but I'm more --

(Laughter.)

MR. CRUZ: -- terrified of losing my job. And going back to my co-workers, 650 directly employed in Tesoro Martinez. We have about 1,000 contractors. And I know yesterday there was a meeting, and it was discussed that -- offhand that people can be retrained to green jobs, people can be relocated. But it kind of brings images of Solyndra, Fisker Motors, and other failed green

jobs out there. So you understand our hesitation and our stress, especially seeing all the numbers come up.

Yeah, it is hard not to be concerned, because we are Californians, we are Californians who work in the industry, who help drive the economy. And I just hope that the Board does its due process of actually analyzing the unintended consequences, the impacts, because I love California.

I don't really want to go to Texas. I've been there. California has a different standard of living. I immigrated here from the Philippines back in 1998, signed up in the military, did my stint for about 3 years, went through college, worked various jobs, and then discovered this industry.

This is one of the few industries where you can only have a high school diploma and actually earn a living wage in California. In a way, we're all environmentalists, because we want to make sure that there's no spills or fires, because I'm the one who has to respond to a spill or fire. I'm part of the emergency brigade in my refinery.

So thank you again for letting me speak. And I appreciate all the concerns that are being brought up here, both for the environmental and the industry side.

CHAIR NICHOLS: Thank you. You know, you have a

right to speak. It's not -- we didn't just let you speak. You're here, because you have a right to speak, and we have an obligation to listen, and we also have an obligation to try to put together a plan that works, and that works for the most people, and that causes the least disruption.

So we really do appreciate your coming and telling us your concern, as an individual. And understand that we are listening, not just to you or those who come, but also to all of the information that we can get. We're not voting on anything here today, but we do really appreciate the fact that these are big decisions and they impact real people's lives. So thank you for taking the time.

BOARD MEMBER BALMES: And despite your jitters, you did a really good job.

(Laughter.)

MS. NGUYEN: Hi. My name is Callie Nguyen. And I'm an environmental air specialist at the Chevron Richmond Refinery. I've been with Chevron for about 2 and a half years. And before that, I worked for BAAQMD for 7.

I took the time off work to come here today, because I am concerned, I think as many people have said, about the potential impact of this plan in ARB's analysis -- economic analysis. In the economic analysis,

it says that the proposed plan will cost anywhere from 62,000 to 99,000 jobs.

Since my industry seems to be the only one with a direct measure, I'm concerned most of these jobs will be lost in my industry. I am proud to work in this industry for many reasons, but I am most proud of the diversity of the people that I get to work with. Thirty percent of industry workers are latinx, 30 percent have a bachelor's degree or higher, and a third of workers have high school credentials or less.

This last point is very personal to me as the child of an immigrant refugee, who came to the U.S. from Vietnam. My father came here with no formal American education, and was only able to find work in the light and heavy industries.

But without these jobs, like the jobs in my industry, my father would have very likely never risen above the fragile economic status he arrived in.

I will end by saying as an environmental specialist, I am pro-regulation, and I -- I know you have a difficult decision in front of you. I only ask as a child of a -- of a working class family that you keep in mind the widening gap and income inequality in California, and the possible impact of this proposal on the working class and immigrants of our States. These communities may

not have the means nor the desire to relocate and/or retrain for entirely new careers.

Thank you.

CHAIR NICHOLS: Thank you.

MR. REED: Good morning, Madam Chair and Board members. My name is Greg Reed. I'm an employee at the Chevron refinery in Richmond. And I've been an employee there for 11 years. My background is a little unique. I'm actually a third generation from Richmond. My family is from all parts of Richmond, but my father is from North Richmond. And I am a legacy child. So I'm the second of our family to work at Richmond -- or at Chevron. We don't consider it Chevron, it's Standard Oil.

(Laughter.)

MR. REED: That's what the old people tell me. I want to comment on some of the other comments that my counterparts have already addressed. The potential for job loss, and these type of job losses, I represent -- I want to be a face and a voice for those that couldn't be here. I did take off work to be here, and it's very important. My background, I started at Chevron as an operator. I operated many of the units.

Now, I'm in the health and environmental safety department. I'm actually in compliance. So everyone at the refinery is familiar with me. We do take

environmental compliance very serious and I do hold people accountable.

As you can see, I'm a member of the Chevron Fire Department. I'm a volunteer brigade member. Because of that, not only was I able to get a job -- and we're talking jobs with just like -- like Patrick said, high school diploma, driver's license, and a clean record, I was able to gain skills and more training to further my career.

I'm a certified hazmat technician. I'm certified to respond in confined space rescue, emergency response, CPR, wildland fire, the list goes on.

A few of my concerns, like everyone else, is job loss. I already come from an economically challenged neighborhood and community. And it's -- and most of the people that I come in contact with that I talk to, they're concerns is how can I got a job at Chevron, not how are we going to lose jobs at Chevron?

So I want to just encourage you please to take a serious look at the economic impact of the proposed -- of the proposed plan. Also, just the tax revenue from our facility as well to the city.

I want to speak on behalf of just the 1,200 employees, the 3,000 contractors that I work with on a daily basis, they -- we have various people that are

relying on us. I think about the ladies at the lunch counter that own the small businesses that we frequent for lunch. I think about our vendors that we do business with, whether it's parts, maintenance, or materials, our painters. I also want to remember just our truck drivers and all the delivery folks. These are people that come in and out that may not always be thought of, but are affected by what happens at our facility.

I also want to just -- also remind you that there's single mothers. I have a cousin, and she's raising here own son off of one income, and that's unheard of in California these days.

We are very proud of what we do.

Excuse me.

We're safe an reliable for those people, and we want to make sure that all the loved ones that you want to see, you're able to go see them, take your kids to school, go to the grocery store and put food on the table.

CHAIR NICHOLS: Excuse me, but your time is up. That was what that buzzer meant.

MR. REED: All right. Well, I think you for your time.

CHAIR NICHOLS: Thank you.

And while we're waiting for our next speaker.

25 You know, I don't usually interrupt the flow or try to get

into debates with people, believe me, but I think it's important that we understand something, because several people have now quoted numbers from the economic analysis that's in the report to the effect that there would be job losses. And that's something that makes us all sit up and take notice, because we've lived through times in this State where there have been job losses.

But I want to be clear that this economic assessment is looking prospectively out to 2030. And, Emily, you're the economist here, so maybe you could explain what those numbers are actually referring to.

CHIEF ECONOMIST WIMBERGER: Yes. There's been a lot of reference to -- it's page 23, Table 15. And I think it is important to put these numbers into context. So what we're doing in this table and generally when we're modeling the overall impacts of both the proposed plan and all of the alternatives is we're projecting the California economy into 2030.

So this is a different California economy based on today's, but we're thinking about growth. And in 2030, the California economy is a \$3.4 trillion economy. So what this number -- this number that's being referred to, it's really a reduction in the growth of jobs from that 2030 baseline that we're seeing. And that's not, you know, job losses from today's level. It doesn't represent

job losses in 2030. It's really a slowing in the growth of job -- of jobs.

And so looking at overall employment in California, it's about a 0.3 percent change in the level of employment in 2030 relative to this projected baseline. And what that means is it would take about 3 months longer for these jobs to materialize.

So the economy is just growing a little bit slower because of the implementation of the proposed plan.

CHAIR NICHOLS: Okay. So, I mean, there is an impact, no question about it, but it's off of some growth that otherwise we would expect to be more robust and fast.

CHIEF ECONOMIST WIMBERGER: That's right. We base our projections on Department of Finance's projections of the California economy. So there's growth in production, there's growth in population. So we're going to see a continuing growth in the California economy for 2030.

CHAIR NICHOLS: And that's really 3 months worth of growth?

CHIEF ECONOMIST WIMBERGER: It's about 3 months, yeah.

CHAIR NICHOLS: Okay. Well, I hope at least that when we continue to talk about this and others do, that they try to be accurate then when they talk about it.

Okay. Thank you, sir. Go ahead.

MR. QUIROZ: Good morning. My name is Richard Quiroz. I've worked at Chevron for almost 29 years, and I'll try to avoid numbers here.

(Laughter.)

MR. QUIROZ: This scoping plan presents challenges and opportunities. The challenge obviously is achieving greenhouse gas emissions in support of climate objectives.

There's an opportunity here for the Board to act in ways that won't adversely affect employment, that won't restrict the flow of goods and services, and that won't restrict the capabilities of our airports.

Every refinery job like mine shouldn't get eliminated. It has a cascading effect on the local economy, assuming that there's a non -- that there's an alternative non-carbon economy awaiting is not realistic. And at my age, it's too late to start over.

Many cities are struggling to maintain essential services, like fire, police, and maintaining roads.

Several more cities are close to bankruptcy. Measures that target refinery operations could aggravate many of these situations.

Many people here today drove here, some probably flew here. Please think about a world wear these means of

travel are becoming less available. And I've worked here almost 29 years, and I still can't afford a Tesla.

(Laughter.)

MR. QUIROZ: Reservation glitches have caused -reservation glitches and inclement weather have caused
tremendous chaos at airports lately. Think about a world
where every day at the airports is as chaotic as
Thanksgiving weekend, because there are not enough flights
due to fuel being unavailable.

But I -- but I do want to commend, Madam Chair, for your suggestion to take the time to continue to work on a measured holistic approach that realistically considers impacts on society.

Thank you for the opportunity to speak.

CHAIR NICHOLS: Thanks.

MR. CUFFEL: Good morning, Madam Chair, members of the Board, ARB staff, and members of the public. My name is Don Cuffel, and I'm the Health Safety and Environmental Director as Valero's Benicia refinery. But more important than my role in industry, I'm a native Californian, and I have 3 grandchildren. And we all live here and we all breathe the air. So don't think for one minute that I'm not committed to air quality and protecting the environment.

When I look at proposed regulations, or in this

case proposed scoping plan update, I look through both of those lenses. I look through the lens of an experienced fellow in industry, and as a citizen with a family that I -- for which I have concerns.

So I was disappointed to read -- and forgive me here while I get my glasses on -- that for refineries the regulation would require facilities to become more efficient through such actions as boiler electrification. And the reason I'm disappointed is because that's not a viable solution. No matter how well intended it is, it doesn't reflect an understanding of the role that boilers play in refineries, not only to generate steam, but to keep the refinery in, what we call, fuel gas balance, something I can't explain in 3 minutes.

However, staying in fuel gas balance is essential for a safe, stable, environmentally compliant operation.

It's not discretionary. It's absolutely a must.

So my specific ask for the Board today is that we have technical meetings with staff, not workshops with presentations, but that we sit down and talk about what is the role of a boiler in a refinery, and is it viable to include it as a proposed solution in your plan.

That really concerns me, because I think it -- it may set people up to think, oh, all they need to do it electrify. That should be quite easily done, and it's

not. So that's my specific ask.

Thank you for considering my request.

CHAIR NICHOLS: Thank you.

MR. SCHUCHARD: My name is Ryan Schuchard. I'm with CalStart. We represent 160-plus member companies who are committed to a clean transportation future. These are transit agencies, clean fuel, clean vehicle technology producers, creating jobs and building revenues and investments for the State.

Madam Chair and Board members, thank you very much for this -- for this forum. Senator Lara, welcome. It's great to have you.

And let me just please first say thank you to the staff of ARB for such a diligent and thoughtful process to get us to this point. Just a couple of quick items.

Number one, CalStart continues to advocate for the inclusion of cap and trade and the Low Carbon Fuel Standard post-2020. These are policies which create the incentives that companies need to invest in the technologies that bring the prices down, and create the jobs in the future.

Number two, as for the Low Carbon Fuel Standard reduction targets specifically, please let me underline that a higher stringency in the policy means more incentives, and a faster path to commercializing new

technology and creating jobs. A 20 percent slope, which is one of the paths considered, is merely a straight line from 2010. And we need to be ramping up and not down our commitments.

And I'll just close by saying that as we were speaking a new report was released that highlights how cap and trade and LCFS are complementary, that strong LCFS drives drown auction prices.

Actually, one final closure remark. Let me just say that ARB's leadership today is more important and more visible in the United States than it ever has been, and we applaud you all for your leadership.

Thank you.

MR. TOWNSEND: Good morning, Madam Chair and members of the Board. Thank you very much for the opportunity to speak with you today. My name is Kevin Townsend. I'm with a company called Bluesource and we develop carbon offset projects.

It's a tremendously tumultuous time in our country right now, and there are many reasons for this. But one of the ones that is most perplexing to me, and disconcerting, is that truth just doesn't seem to matter any more.

It seems that facts can be given without fact checking. It seems that information can be manipulated,

and it seems that as long as we deny something enough times, that it no longer matters if it's true.

And I just want to -- this goes without saying, but I want to encourage the Board to be resolute in just raging against this trend through very, very careful evaluation of the information that it's presented with.

So why do I bring this up? There are claims that are being made about the effects of the kinds of projects that companies like mine produce. And there are even implications of our intent. And these are going without fact checking. And you'll probably hear some of them today.

And I know that this is a value that's shared by the Board, but I do what I do, because I have a passion for helping local and global communities with respect to environmental harm. Another example that is more concrete is that there's lot of talk around a Dornsife study of Preliminary Environmental Equity Assessment of California's Cap-and-Trade Program. And I am not here, let me be clear, to refute or agree with any of the report's findings.

I just want to note that it is preliminary. And there's a very important phrase, and I want to be accurate as well in my facts, so I'm going to read it. In this report in the conclusion that say "Further research is

needed before firm policy conclusions can be drawn from this preliminary analysis".

Yet, that's exactly what some are trying to do.

They're trying to influence policy decisions using a preliminary assessment. And so I think that these authors need to be given more time to make their assessment full and complete, and that it should be peer reviewed as well. And it does remind of another study that I also don't want to -- or I'm sorry, actually, the next sentence in the report says that, "As regulated industries adapt to future reductions in the emissions cap, California is likely to see more reductions in localized GHG and co-pollutant emissions".

CHAIR NICHOLS: What is the study you're referring to? You said Dornsife?

MR. TOWNSEND: USC Dornsife.

CHAIR NICHOLS: Oh, USC. Okay.

MR. TOWNSEND: I'm sorry.

CHAIR NICHOLS: Oh, the Cushing Report.

Okay. Sorry. Thank you.

MR. TOWNSEND: It goes by a few names but that's the one. And so the report is actually saying that we're likely to see more emission reductions local as the program goes on.

And that reminds me of a report that was recently

done by the ABT Institute on the RGGI program over 5-year span, that has some remarkable health benefits attributed to a 5-year timeline: 8,200 to 9,900 asthma exacerbations avoided; 14,500 respiratory illnesses voided. More, but maybe the most important one, is the 300 to 833 -- 830 adult deaths avoided in a 5 year program.

May I have just a few more seconds?

CHAIR NICHOLS: All right. Go ahead. Finish up.

MR. TOWNSEND: Thank you.

I just want to encourage us that cap and trade needs more time. It was a design -- it was a program designed to take a while. And so let's not throw it out or radically change it before it has the chance to do exactly what it's intended to do.

Thank you.

CHAIR NICHOLS: Thank you.

MR. EBERT: Good morning, Chair Nichols and ARB Board. I'm Craig Ebert, President of the Climate Action Reserve. Any conscientious Californian should be concerned about local air quality and toxicity concerns affecting any community, particularly our disadvantaged communities.

We need effective strategies to address that problem, but global climate change strategies is not the place to start. And in particular, trying to take carbon

offsets out of the equation fails to recognize that they're actually part of the solution, not the problem.

Carbon offsets have a strong environmental justice underpinning. You can just look at that by examining the projects that have been done here in the State, many of which are in disadvantaged or severely disadvantaged communities.

And just use one example as -- of a dairy digester. Anybody who's familiar with uncontrolled emissions in water control at a farm from their childhood knows full well what the air and water quality benefits are of effective environmental control. And are offset projects are bringing those benefits to the table. We're not only achieving direct emission reductions, but we're creating jobs in many communities around the State.

I mentioned that there is a strong environmental justice component. I had the privilege of assisting on international negotiations leading up to Kyoto Protocol. And I can tell you offsets are part of the international formulation for solving the climate problem, precisely because countries like Brazil and the rest of the developing countries demanded assistance on reducing emissions for a problem that they didn't feel was particularly their responsibility.

Why did I bring this up today?

We're also the 18th largest emitter in the world. And it's hard to be an international leader if all we're going to do is look inward. There's a fundamental moral imperative here with our climate strategy, and carbon offsets are one of the tools in the tool belt. Humanity is out of time. We need more tools, not fewer, and let's ensure that carbon offsets and an effective cap and trade program is available to all of us moving forward.

Thank you.

CHAIR NICHOLS: Thanks.

MR. HUGHES: Keeping my eye on the clock.

Thank you, Chair Nichols, members of the Board.

It's an honor to be here. My name is Gary Graham Hughes,

and I work with Friends of the Earth, United States.

We are encouraged by the decision of the Board to provide more time to the public to comment on the scoping plan. And we also commend the Board for the decision to give the staff more time to develop a scoping plan that is scientifically defensible, economically fair, and socially just.

And the reason why we think this is important that the staff have more time to develop the scoping plan, is that we find the scoping plan to be deficient in many ways, including most principally in science, and a failure

to fully address the root causes of global climate change, which is essentially the mobilization of fossilized carbon and our use of fossil fuels.

One of our greatest concerns is that the Cap-and-Trade Program, as it is being built out in California, is leaky. It's phenomenally leaky. The dependence on offsets is leakage, and by definition in science.

Actually, the Cap-and-Trade Program has all the environmental integrity of the emergency spillway at the Oroville Dam. We besiege the members of the Board to seriously address the public health shortcomings and the erroneous scientific assumptions underpinning the role of offsets and the concept of offsets as they're being presented in the California Cap-and-Trade Program.

Offsets fail to provide public health benefits in the communities shouldering the burden of pollution, and they also perpetuate a type of climate illiteracy, a certain climate science denial. And remember that one of the defining characteristics of climate science denial is the cherry-picking of science, and the using of political and economic reasoning to push science aside.

So the science is really clear that the impact from our mobilizing fossilized carbon and burning fossil fuels is essentially irreversible. And as you know, the

Forest Carbon Plan is now up for discussion this afternoon, and it's incredibly inadequate.

So as far as California providing global leadership, it's actually essential that California take action here at home. Okay. And that includes addressing deforestation.

And the last thing I want to say really as someone who grew up in a timber family, and the discussion about jobs, it's very important, and we demand a just transition for fossil fuel communities and timber communities, but to remember there are no jobs on a dead planet.

I'm going to leave a couple items with the clerk. Hopefully, copies of all this can be made and distributed to the Board in order -- especially that you can read a letter that we presented last fall.

CHAIR NICHOLS: That will be included.

Thank you.

MR. BENGTSSON: Good morning, Chair Nichols, members of the Board and a warm welcome to Senator Lara. Lots of clever and moving testimony here today. I'm just going to tell you up front, I'm coming at you straightforward and wonky.

So 3 points for your consideration.

(Laughter.)

MR. BENGTSSON: The first is just I'd like to reiterate that achieving California's 2030 goals is going to take a combination of well-designed programs, like the LCFS, like the RPS, and cap and trade.

We agree with the analysis in the proposed scoping plan that points to many of the alternatives being inadequate from both an environmental and an economic perspective. And the proposed scenario in Alternative 3, both of which include cap-and-trade, are most suitable to be considered for adoption with, of course, some modifications.

One modification that is -- bears talking about today is the addition of a strength in price cap for cap-and-trade allowance prices. This was actually seconded by the Legislative Analyst's Office this week, which mentioned that this will be important as the -- as substantial price volatility could get involved as we move towards a 2030 -- moved towards 2030.

So second, returning to the new modeling in the proposed scoping plan, we really want to recognize staff for their efforts to thoroughly evaluate all of the alternatives and to have added new alternatives. In particular, we appreciate the incorporation of uncertainty into the analysis, which also points towards cap and trade as a great option.

And similarly, we thank ARB for providing a dollar per metric done metric for each cost -- of cost effectiveness for each scoping plan measure, which again endorses cap and trade as a strong cost-effective option for achieving our goals.

Finally, we encourage ARB to provide some additional information -- all the great analysis they've done, and we just want more -- as part of the AB 197 analysis. So yesterday, Vice Chair Berg made a really great point about having to define the zeros for her employees when sharing financial information. And this is basically the same principle.

We'd like ARB to include a summary of its current local air pollutant inventory. This is needed to give context for the amount of reductions, which are quantified for each local air pollutant. We just need to know what we're looking at, how much does that really mean?

Additionally, we encourage ARB to provide additional details on its methods and assumptions for determining the avoided criteria and toxic emissions presented in Table 3-1. It's just important, so that we can interpret and understand the avoided emissions rates that are assumed.

There are some counterintuitive findings, especially for the electric sector, and we have some more

detailed comments that we'll submit, and we can talk through those with staff if need be.

But again, we really appreciate staff continued efforts. It's a lot of work to get us to 2030. And we agree that the cap-and-trade inclusive options are the right way for California to meet its important environmental goals.

Thank you very much.

CHAIR NICHOLS: Thanks.

MR. WUNDER: Madam Chairman, members of the Board, welcome to Senator Lara. My name is Andy Wunder. I'm here with Ceres. We are a nonprofit environmental group that advocates for sustainability leadership. I -- we mobilize a network of businesses, 39 leading businesses across the U.S., that represents \$400,000,000,000 in annual revenue.

This group advocates for the adoption of meaningful energy and climate legislation, and is excited to provide comment on the scoping plan. This group called BICEP includes many California based, including Levi's, eBay, Dignity Health.

BICEP is here to show business support for the extension of California's successful Cap-and-Trade

Program. Cap and trade has proven an excellent backstop to the State's greenhouse gas mitigation work, and we

applaud staff for their inclusion of cap and trade in the proposed plan.

BICEP supports cap and trade as a key component of California's Climate Program, along with complimentary programs like the Low Carbon Fuel Standard, because it allows for compliance to be achieved in the most cost-effective way possible.

With increasingly ambitious goals, the adoption of the most economically efficient policy is paramount for California businesses. Furthermore, continuing the use of a current policy with a successful 4-year track record of compliance provides regulatory consistency that is critical for California businesses.

BICEP also appreciates the global leadership value that California's Cap-and-Trade Program provides, as it allows for international partnerships, supports future leakages, and is serving as a model for carbon pricing nationally and globally.

Put simply, BICEP believes that cap and trade must be made a central part of the State's strategy to meeting our 2030 emission goals. BICEP is also very supportive of strong transportation policies, advancing the deployment of clean vehicles and clean fuels in order to reduce carbon emissions from the sector.

We see the Low Carbon Fuel Standard as a key

California climate program, and we support the extension of the Low Carbon Fuel Standard in the current proposed scenario, which is a key complement to cap and trade. However, we believe the 18 percent recommendation for the Low Carbon Fuel Standard fails to fully leverage a policy that has driven investment in job creation across the State, and we encourage setting a more aggressive Low Carbon Fuel Standard policy for 2030.

We also see the deployment of zero emission passenger and freight vehicles as a key strategy for reducing fuel costs, as well as carbon emissions associated with our company's operations. Given that California's ZEV Program, Zero Emission Vehicle Program, will fall short of its 2025 target, it will be necessary not only to strengthen the post-2025 program, but also provide support for workplace charging, infrastructure, and purchasing incentives in order to drive zero emission vehicle deployment.

Similarly, we urge the adoption of ambitious policies to promote the electrification of heavy-duty trucks.

Thank you for your time.

CHAIR NICHOLS: Thank you.

MS. SULLIVAN: Good afternoon, Chair Nichols and Board, and welcome to Senator Lara. My name is Shelly

Sullivan. I'm here representing the Climate Change Policy Coalition. And I do indeed believe it's unanimous that we all thank you for the extended time in -- for the examination and the review of the 2030 scoping plan and the Cap-and-Trade Regulation.

First, I'd like to say that I think yesterday's conversation, and yesterday afternoon's workshop was extremely important, and it really brought a lot of interesting points to light.

CCPC has long advocated for like -- an Industry Advisory Council, like the EJAC Committee. And I'd like to say that although we've -- it's not a vision of what we had wanted, we wanted to thank La Ronda for reaching out to us and suggesting that she meet with us.

The meeting has not occurred, but we do look forward to that, and I think that that's at least some sort of a start.

Second, we believe that the economic allowances for the all-cap-and-trade scenario should be released. We think that this will allow all stakeholders the ability to assess the merits of that scenario, and we do believe that the more information we have, the better as we move forward.

And finally, CCPC further believes that complimentary -- further complimentary measures will

result in taking funds out of the -- our Cap-and-Trade

Program, and that these measures will actually undermine
the Cap-and-Trade Program with regard to programs
designated for disadvantaged community programs.

We continue to support a well designed Cap-and-Trade Program with a broad use of offsets. And so we hope that you further look toward that as you move toward implementing the 2030 scoping plan.

That's it. Thank you.

CHAIR NICHOLS: Thank you.

MR. GILL: Good afternoon, Board members. My name is Walt Gill. And I'm up here from a small town of Kensington in West Contra Costa County. So I'm a constituent of Supervisor Gioia.

I also work --

BOARD MEMBER GIOIA: There's been a few constituents here today, I see that, yes.

MR. GILL: Yes, and there may be more.

I'm also the Government Affairs Manager at the Chevron refinery in Richmond.

First, I want to thank all of you for the work that you're doing in support of the quality of life in California. It's important to us as citizens and to the many people that work at our facility. Our refinery is the largest in the Bay Area. We supply 25 percent of the

motor gasoline, 70 percent of the jet fuel that goes to the airports to fly the jets, and all of the base lube oil in the western United States.

So we feel we're important to the regional economy. And as you make your decisions, please be thoughtful of that.

We also heard talk about disadvantaged communities this morning. And that's certainly true of Richmond. And our company has been there for 100-plus years, and we're very proud to be part of that community. We recently entered into an agreement with the city to supply \$90,000,000. Some of that was for greenhouse gas reductions. It included a \$35,000,000 scholarship program to allow local high school kids to go to college. So we're very proud of that, and we're going to continue to support the community.

So what we'd like to ask today is that you continue to be thoughtful, use good data as you make these very important decisions. And the other thing that I will ask, as Supervisor Gioia will tell you, the door is always open at our facility to come and take a tour to meet our people, to understand what we do as far as toxic reductions, as far as greenhouse gas reductions.

So we would love to have any of you come and tour our facility in keeping with the Brown Act. And John can

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be your tour guide.

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2 So thank you very much.

3 (Laughter.)

4 CHAIR NICHOLS: I suspect he could give the tour.

5 (Laughter.)

BOARD MEMBER GIOIA: We can show you the

7 | wonderful Richmond shoreline.

(Laughter.)

CHAIR NICHOLS: Great.

MR. PENRITH: Good afternoon. My name is Sean

Penrith. I am the executive director of the Climate

Trust. We're an unusual not for profit. We run an impact

13 | investment fund specifically focused on carbon.

Last year, there was a research report that determined that \$2.89 billion of impact capital remained on the sidelines last year, because there was no investable product. And so when we speak with impact capital people in the major capitals, one of the issues they keep on pointing out to us is, there is no, what they call, deal flow.

And so the offset mechanism that you have carefully implemented offers an unprecedented mechanism, or conduit, to marry impact capital with real and tangible permanent reductions on the ground.

So, in case it's not clear, we are very

supportive of the continuation of the Cap-and-Trade Program post-2020 with the inclusion of the 8 percent limit. Offsets account for 55 million tons of real reductions.

Any discussion about removing them off the table removes 55 million tons of greenhouse gas reductions that have occurred primarily in the natural and working lands sector. We invest in grasslands, forestry, and digesters. Many of our projects are located in disadvantaged communities.

We see firsthand what our investment stimuli does to those projects. So keep up the good work. Let this program reach the 2030 goal, and please continue allowing the inflow of needed impact capital.

Thank you.

CHAIR NICHOLS: Thanks.

MR. BARRETT: Good afternoon. I'm Will Barrett with the American Lung Association in California.

First of all, I'd like to say welcome to Senator Lara, and thank you for your clean air leadership. It's been wonderful working with you in the Capitol and now here. So thank you and welcome.

We support the Board moving forward with the health evaluation, the supplemental evaluation that's coming to look at the potential positive and negative

health outcomes of the full range of programs and scenarios included the plan.

We think we'll find information helpful on lung disease, heart disease, diabetes and other chronic illnesses. I wanted to quickly thank Mr. Gioia, Ms. Takvorian, and Dr. Balmes for their leadership on this issue, as well as the whole Board for supporting.

In addition to looking at air quality and toxic information, we appreciate the Board as moving forward to look at an analysis of active transportation health benefits. We think this is a key example of the type of information that will really help strength the plan going forward.

Recently, at the Strategic Growth Council, and at the public health work group Climate Action Team, there were good discussions of active transportation health benefits that I think will just help strengthen this whole discussion.

Further, I think the adaptive management program within the cap-and-trade rule will be helpful in looking at the local pollution impacts of toxics and other air pollutants.

Overall, we feel the evaluation can strengthen the scoping plan as a whole, and really help us move forward to create the greatest benefit to all

Californians.

To expand the health benefits, we look forward to that ongoing discussion, and think that the Board should really focus on elevating the direct emission reduction programs that can provide the most direct local air quality benefits, such as increasing the zero emission freight targets to over 100,000 units, to optimize black carbon reductions, as well as improve health in port communities, looking at protecting local public health through the refinery measure and other stationary source measures, and as well as strengthening the zero emission vehicle mandate, and Low Carbon Fuel Standard beyond the current rates of progress.

We also think that aligning the land use and transportation targets within the scoping plan can help move the ball forward in building healthy, sustainable communities for all Californians, and think that that's going to be an important measure to really align our SB 375 processes and investments with the 2030 target.

Finally, we think that the evaluation as a whole is really an important step. It's something that the Lung Association and our public health partners have been advocating for over the last several months of this process, and we really do appreciate seeing it come -- you know, coming forward and look forward to participating in

that process.

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So with that, I'll thank you for help, and improving air quality in California.

Thank you very much.

CHAIR NICHOLS: Thank you.

MR. NEWELL: Good morning, Madam Chair, members of the Board. I'm Brent Newell with the Center on Race, Poverty and the Environment.

Before I'm on the clock, I have a clarifying question about the Chair's announcement earlier. I appreciate the extension until June. The EJAC was very interested in getting that extension. The question is, is the cap-and-trade extension regulation also extended till June?

CHAIR NICHOLS: Yes. Yeah.

MR. NEWELL: Okay. And is the comment period for the scoping plan extended beyond March 6th?

CHAIR NICHOLS: I believe everything gets extended.

EXECUTIVE OFFICER COREY: Chair, based on your direction, I'm regrouping with staff, but there will be adjustments to each of those deadlines that were reflected.

CHAIR NICHOLS: I don't have a date, but yes -- EXECUTIVE OFFICER COREY: Correct.

CHAIR NICHOLS: -- there will be and extension.

MR. NEWELL: Thank you very much.

I just am a bit concerned about the way that cap and trade and a direct carbon fee are being framed by staff in the scoping plan. There is a strong bias towards cap and trade. And there is almost a straw man type construction of a direct carbon fee. So we're highlighting the benefits of cap and trade, and the scoping plan draft is not really looking at the benefits of a direct carbon fee. It's pointing out these problems with it.

And, you know, there should be a real sort of fair and even assessment of these things. And, you know, one thing that came to mind during the economic presentation was -- was how a direct carbon fee could negatively impact the California economy. And it wasn't clear to me whether that considered the economic multiplier effect of that revenue being recycled back into the economy through climate investments, through a direct dividend to the public, instead of, right now, revenue from, you know, a lot of multi-national corporations gets offshored, and not recycled back into the economy.

CHAIR NICHOLS: The answer is it is being considered. Staff is --

MR. NEWELL: That is being considered

CHAIR NICHOLS: Yeah, it is.

MR. NEWELL: Well, looking forward to seeing that data then.

CHAIR NICHOLS: We all are.

MR. NEWELL: It's not -- it's not out there yet.

The other thing is, as you know, cap and trade provides an opportunity to achieve direct reductions at these facilities. The OEHHA report and the Cushing report both show the direct correlation between greenhouse gas emissions and toxics and criteria pollutants, so reductions in greenhouse gases also means reductions in these dangerous co-pollutants and health benefits.

You know, the revenue from such a system would be strengthened and enhanced, and also certain and predictable, unlike the market-based approach.

And finally, a direct carbon fee would be transparent and much simpler than this super complex regulatory system that's been constructed. You know, much of the compliance data with cap and trade is confidential business information, and can't be accessed or analyzed, as the Cushing report showed, and as the OEHHA report inferred.

Finally, I want to point out that -- that, you know, as we move into the short-lived climate pollutant hearing next month, that dairy digesters aren't the

solution to the methane problem. I want to applaud the Oakland School District for adopting a climate-friendly school lunch program that reduces greenhouse gas emissions by avoiding such things as non-pasture raised dairy products.

Pasture is a great climate solution. It sequesters carbon. It reduces methane emissions. And as we move towards an economy where we're decarbonizing what we drive, decarbonizing how we heat our homes, we also need to think about how we decarbonize what we're eating, We don't need to put cheese on everything is the simple fact of the matter.

Thank.

CHAIR NICHOLS: Thanks, Brent.

(Laughter.)

MR. AREVALO: Hello. I am Ernesto Arevalo with Communities for a Better Environment. I live in one of these disadvantaged communities that's been brought up in deep East Oakland. I coordinate the Climate Adaptation and Resiliency Enhance Project. CBE operates in environmental justice communities statewide. We oppose extending cap and trade beyond 2020. We want direct pollution cuts instead of pollution trading. Our communities need clean, renewable energy and environmental justice.

Direct cuts and energy transformation to clean renewables is the only way we can, and we will avoid, catastrophic climate change.

And finally clean up the public health disaster that is smog in our communities, which is made even worse by hotter days, which looking at climate change we can see it's going to happen.

We need a just transition to clean safe jobs that includes oil workers, and this should be funded and included into the scoping plan.

CARB also needs to stop the bleeding, stop the business-as-usual practice of oil refinery expansions, and switches to extreme crude. This means a statewide moratorium on extreme oil and refinery expansion.

The scoping plan must support local community efforts to stop oil industry expansion, and recognize that this helps meet its goals. We need more like 50 percent direct emissions cuts in oil emissions. And we need to stop building new gas-fired power plants for electricity.

New reports find we don't need them, and they're costing us a billions unnecessarily. We need 6 to 7 million electric vehicles, according to the State's own modelers to meet cuts by 2030, which would drastically cut smog and greenhouse gas emissions from cars and oil refineries.

This can actually help us to balance the electricity grid by providing energy storage through the car's batteries.

If we don't do this phase-out of fossil fuels, no amount of climate adaptation can save us, especially those of us living in the front lines of injustice. That's how we define front-line communities is people that are facing existing injustices. And what we know about climate change is that it just intensifies those injustices.

So please beef up the scoping plan, and ditch cap and trade.

Thank you.

CHAIR NICHOLS: Thank you.

MR. MILLER: Good morning -- it's still morning?

Good afternoon. Sorry

CHAIR NICHOLS: Afternoon.

MR. MILLER: I'm Taylor Miller, appearing as a volunteer on behalf of a organization called Yosemite Stanislaus Solutions, better known as YSS. We -- YSS is a diverse coalition of 23 community interests focused on restoring the health and resiliency of the 1,000,000-acre Stanislaus National Forest in Tuolumne County.

At the outset, our organization would align itself strongly with the comments of your first witness today, Erik White, from the Placer County APCD. We're

generally in support of the scoping plan and its greater emphasis on natural and working lands in the last few years here at ARB, which is great.

We would like to see more emphasis on national forest restoration activities, and we'll submit additional detailed comments whenever the new deadline is or maybe before that. And, of course, we'll participate in this afternoon's Forest Carbon Plan workshop.

The YSS organization is located in the area where the Rim Fire occurred, and you may have heard of that, in 2013. Over 250,000 acres were burned in that enormous fire, 12,000,000 tons of GHG emissions occurred, which we understand was more than 3 times the year-on-year GHG reductions achieved in all other sectors for that year.

Fires such as this have become unfortunately more common during the -- due to, among other things, 100 years of aggressive fire suppression, and decades of selection of the largest, most fire resilient trees. More recently, of course, drought and climate change have played a role.

Research documents that the frequency and intensity of such mega fires and insect-caused mortalities can be reduced through ecological thinning and prescribed fire.

Of course, the difficult question is who should pay for this, and manage the effort, and how does it fit

into the myriad of issues which the scoping plan must address?

While this is obviously a dominant federal responsibility on national forest lands, how these lands are managed does profoundly affect the State's GHG emissions. There's been recent focus on modeling the GHG inputs and outputs of the entire State natural land system. While modeling can add value over time, as the results from forest health treatments increase its accuracy, we're concerned that this attempt to model the workings of such a varied and complex natural system could delay action.

That seems to have already happened. So I'm just about out of time, and I'll just say what we're urging is more action, maybe not so much modeling, at least --

CHAIR NICHOLS: Thank you

MR. MILLER: -- do both at the same time.

Thank you.

(Laughter.)

MR. AMODIO: Thank you. I'm John Amodio with the Tuolumne River Trust. And Ms. Nichols and the whole Board we are deeply indebted to your long leadership, globally important leadership on this matter.

The Tuolumne River was -- 95 percent of the Rim Fire occurred within the Tuolumne River, so we've become

quite knowledgeable of the situation. And here -- I'm here today to highlight an emerging challenge, what one might call an inconvenient truth California style.

California became a global leader on climate change through passage of AB 32 in 2006. In the early years of its implementation, it was reasonable to not include wildfire emissions as part of the inventory, because one could argue that they were part of the natural background.

The inconvenient truth is that we now know that both from actual events, and further research, that that assumption is simply not true. Our forest have been transformed, indeed ecologically impoverished by more than 100 years of overaggressive fire suppression and removal of most of the large fire resilient and most efficient carbon sequestering trees.

In truth, our Sierra forests, particularly those on the more than 10,000,000 acres of national forestlands have become highly susceptible to uncontrollable wildfires, and unprecedented bark beetle epidemics, such as the current one that has killed more than 66,000,000 trees in the Sierra alone.

Sierra forests are rapidly becoming one of the largest greenhouse gas emitters in California. And as they continue their rapid decline, their capacity to

sequester greenhouse gas is similarly declining. Much more dangerous is that the rapid growth in size and severity of wildfires, and the unprecedented bark beetle epidemic, are already affecting the reductions being achieved through the AB 32 program.

You've heard about the Rim Fire, and that gives you a magnitude of what could happen. So this is definitely, we believe, an all hands on deck emergency. We believe that it will require robust implementation of a State and federal partnership to restore this areas ecological health.

Your leadership will be essential to develop and implement a scale, the watershed improvement program that the Sierra Nevada Conservancy has developed. Twenty years ago, you had the vision for reducing public health impacts from vehicular pollution.

You launched a program, that despite the lack of technology or capability being in place, has really saved many, many lives.

Our plead with you today is to assert similar bold leadership now. If anything, the stakes are even higher, the challenge is greater, as is the need for your full on leadership participation.

We look forward to continue working with you on this inconvenient truth.

Thank you.

MR. RYNEARSON: Chair Nichols, Board members, Senator Lara, welcome to the -- welcome to the Board.

Gary Rynearson, Green Diamond Resource Company in Humboldt and Del Norte County timberland owners.

First I'd like to thank the Chair for extending the deadline. The FCAT or the FCAT forest carbon plan is still being developed. And I think it's important that be done, so it can help inform this scoping plan.

Second of all, the scoping plan truly recognizes the benefit of forests to the -- to helping address the climate issues. So we appreciate that, and we appreciate the opportunity.

I believe you have my written comments, which includes some attachments also, so let me summarize those very quickly. One of the key issues and I -- just oddly enough all the forestry folks seem to bunch up here to follow up is identifying timber -- what we're really talking about. Timberland versus forestland versus grassland versus brushlands.

I think it's important to identify where the opportunities are, what was there -- there are some areas that are emitter, there's other areas, including forestlands, which are currently sequestering carbon.

Attachment 2 demonstrates the forest inventory

and analysis data from the U.S. Forest Service, that shows timberlands are a net sequester of carbon. Now, that -- that's an ongoing -- they have ongoing studies that demonstrate that, and that's the most current data. Our timberlands are sequestering carbon, both on the public lands and the private Lands.

So I think that's important. So as we go forward identifying what we're talking about, are we talking timberlands, are we talking woodlands? Are we talking -- brushlands is important to identify and understanding where the opportunities are for improvement.

You just heard some of the opportunities for improvement. It's important that we manage these timberlands. We've let them get in -- get in an overstock state, especially in some of the central Sierra national forests. And updated John's number, it's 102 million dead trees now, and it's moving north. And unfortunately, it's starting to approach the Tahoe Basin.

So that's a critical real-time situation that we need to address. So managing those forest, getting them back to a number of trees breaker that -- where they can be resilient to fire into insect and disease is critical. We also need the support in keeping the -- a regulatory environment in place that allows landowners to continue to manage.

Now, I say the cost of that regulatory environment, not any diminution of the regulatory standards but to have a cost structure in place that encourages landowners to continue to manage their property, especially the small landowners.

We also need to support by both maintaining and to create new infrastructure, saw mills, bioenergy facilities, biomass facilities, whether it's biofuel or whether it's direct combustion to power. These are critical, especially looking at the lack of opportunities to remove those dead trees and move them into a carbon neutral power source.

We'll also -- we also have some specific concerns that are more technical in nature about Appendix G. It shows a rapid decline in the forest carbon in starting in 2017, this year, which is inconsistent when you look at the Attachment 3 with the Option 8 documents for 3 major landowners, including Green Diamond, Humboldt Redwood, and Mendocino, all of which have a positive slope for 100-year period. So I encourage -- I look forward to working with staff on this issue.

Thank you very much.

CHAIR NICHOLS: Thank you.

MR. JATKAR: Good afternoon, Chair Nichols and members of the Board. And welcome Senator Lara.

My name is Shrayas Jatkar, Coalition for Clean Air. And first, I'd like to start off by talking about the plan as a whole plan, because I think it is important to see it as that first before getting into the specific components. And so I do want to appreciate and recognize that there is an emphasis here on direct emission reductions to achieve most of our greenhouse gas emission reductions towards the 2030 target.

So I think that's -- that's an important point, and, of course, that several of those emission reduction measures -- direct emission reduction measures are existing known commitments.

And, of course, it's important then to acknowledge that any carbon pricing mechanism is complimentary to, and not the centerpiece of our State's approach to dealing with climate change, as sometimes it's reported.

When it comes to those direct emission reduction measures, we would like to see stronger requirements, stronger standards put into place, particularly on the transportation sector, which is the leading source of emissions for both greenhouse gas emissions and air pollutants.

Specifically, when it comes to cleaner vehicles, stronger targets for zero emission vehicles, and advanced

technology vehicles in the light-duty as well as the freight sectors.

When it comes to cleaner fuels, we want to see a stronger Low Carbon Fuel Standard, and would support what others have discussed, in terms of really ramping up that standard. And also, it's not quite clear to me where the low emission diesel standard exactly lives. I saw it in one of the alternatives but wasn't sure if that is actually a core part of the mobile source strategy or not.

The point anyway is that we really do want to see movement begin on a low emission diesel standard. This is going to be very important in the freight sector for those long-haul trucks, but also in off-road applications, of course, in the agricultural sector, construction sector. So that low emission diesel standard, I think, is another important measure when it comes to cleaning up the fuels in the State.

And also on that point, I'll just say, as we've said before, we support the refinery measure being included.

Lastly, I'll just touch on the part that gets a lot of attention, the carbon pricing mechanism. We are glad to see more attention to cap and tax type measure. That is something -- that is the type of measure we support. We want to see a fee on emissions.

Given AB 197, and how it's being integrated at least in certain respects into the scoping plan, I think it is appropriate to request again that there be some analysis, if possible, to look at fee on emissions that includes criteria air pollutants and toxic air contaminants and not just greenhouse gas emissions.

And we think that that is a way to demonstrate California's leadership, not just in State climate policy, which the State has led on for many years and decades, but really leading on environmental justice in our climate policy.

Thank you.

CHAIR NICHOLS: Okay. Thanks.

MS. VANDERWARKER: Good afternoon, Board members and welcome, Senator Lara. My name is Amy Vanderwarker with the California -- sorry -- Environmental Justice Alliance.

First, I just want to say thank you very much for the meeting with the Environmental Justice Advisory

Committee yesterday. I know that takes a lot of time. I think it's a really important step forward. And I also want to say thank you for extending the timeline. That's a recommendation that CEJA strongly supported. And I want to give a special thank you to the EJAC for all of their hard work, but also Board Member Takvorian and Chair

Nichols for your work on the matter.

And we really hope that it crates space in the coming months for a full analysis of EJAC recommendations and other recommendations from the environmental justice community on how we can really achieve air quality and greenhouse gas reductions in our most vulnerable communities, because that is the critical issue for EJ organizations as part of our alliance. In workshop after workshop across the State, you know, community residents echoed their request for health improvements through direct emission reductions, as well as greenhouse gas emission reductions. That's critical to our communities as well.

And we feel like both the EJAC analysis will be really important, but also a full response from the Board to both the OEHHA report, as well as the Cushing and Pastor report released last fall. As of yet, we haven't received -- really seen a full analysis, a full response from the Board, particularly to the Cushing report, and the OEHHA report just came out. But both really highlight the potential health benefits we can achieve in our scoping plan and our climate policy more broadly, if we take those findings seriously and really think about how we can address them.

And so the scoping plan moving forward I hope in

the coming months will include a direct response to both of those reports, and to the EJ community more broadly.

I'd also like to -- and we also are encouraged by the inclusion of the health analysis. We look forward to seeing that. I think that can potentially get at some of the many issues highlighted in the report, but both those reports do also look at a wide range of issues that the scoping plan really needs to address.

We really appreciate inclusion of the cap-and-tax scenario, so thank you for your work on it. We do agree that there is still more robust analysis that's needed. It does feel very skeletal. I think it's very indicative that it includes strategies such as facility level caps. That can be a critical strategy to actually addressing environmental justice or hot spot issues.

We also look forward to seeing the economic analysis so we can understand the modeling behind some of the rather dire predictions that were outlined.

Finally, I think also related to the OEHHA and Cushing and Pastor report is a more clear plan for AB 197 implementation. AB 197 we really support the refinery reduction rule, but it really should not be limited to the refinery sector. There's nothing in the statute limits to that. It can also be a critical strategy to both addressing EJ issues, addressing many of the issues

outlined in the OEHHA and Pastor reports, achieving direct emission reductions, and also getting at the very real data challenges that the OEHHA report highlighted.

Thank you so much for your time and we look forward to continuing the conversation.

MR. FACCIOLA: Good afternoon, Chair Nichols, and members of the Board. I'm Nick Facciola, director of carbon projects at Origin Climate, and a proud resident of Oakland, California.

Scrapping the Cap-and-Trade Program at this point, and in particular the offsets piece, I think would be a terrible blow to innovation to green jobs and to a known sector of cost effective greenhouse gas emission reductions. As well, it would also really harm the progressive third generation farmers who are just trying to do the right thing. I see dozens of these folks around the country.

I urge the Board to weigh these considerations heavily against the possible disruption of the path that we've all worked so hard to forge, instead allowing the ARB staff to produce a wider pool of offset protocols will -- would spur innovation in California. It would add additional green jobs, and it would improve the growing list of co-benefits to the program ranging from natural working lands in agriculture to perhaps the Delta

wetlands. And we can even work to develop emission reduction protocols that are designed to work in urban areas.

So let us work together to address -- to address these environmental justice concerns. Within the framework of cap and trade, I believe it can be done.

Thank you.

MR. COSTANTINO: Hi. Good morning. John Costantino over here.

Senator Lara, welcome. My time flies. It was 8 years ago that -- in December of 2008 that we adopted the original soaping plan. My daughter at the time was in first grade. Now, she's in high school.

And it's -- one of the things that came about in scoping plan was a thoughtful process to put all the pieces together. And today I'm here representing the Ad Hoc Offsets Group that was put together in the last few months really to educate and revisit the issue of offsets.

And I come with an offer to educate. We're putting together materials. We're putting together the data. Happy to answer any questions. Now that we have a little more time, where are offsets? How do they impact California? How do you fund them? What are they? What are they not?

And the members of the Offset Group, there's 13

members that provide the vast majority of offsets in California. They are the experts.

They know their digesters, ODS, forests, and other protocols. And they will be willing to speak, answer questions, and get to the bottom of what really is a question that I think was brought up a lot lately, what are offsets and how do they value California.

So with that, I just leave the offer and thank you for your time.

CHAIR NICHOLS: Thanks. Look like a good project. Thank you.

Michael Carr.

There you go. Hi.

MR. CARR: Good afternoon, Madam Chair, and all members of the Board. Thanks very much for the chance to speak today.

I'm going to start by reminding folks that Shell supports a market based Cap-and-Trade Program as the best mechanism to achieve the goals of the Paris Accord, and the Under2 MOU at the lowest cost to citizens in California and ultimately elsewhere.

The debate that we're now having around how we actually end up choosing to address climate change in California is very important.

I know that the ARB and others in the State pay

attention to the European Union who are co-leaders in the climate change space. Their recent activity is informative. The EU Parliament voted on Wednesday - yes, that's yesterday - to reform their ETS. I'll speak to aspects of that vote that's most relevant to my industry.

They passed solidly with yeas outnumbering nays by more than 100 votes continuation of cap and trade with continuation of allowances for emission intensive industries through 2030 with 100 percent allocation to the most efficient players in industry and provision of 12 billion Euros of support to the industry that isn't as efficient, because they recognize that industry will need the support.

Ensuring ongoing assistance to the industry by shifting 5 percent of the auction reserve to the allowance reserve, and thus recognizing that industry is an integral part of the fabric of society that provides jobs and will need support.

So on to the refinery stationary source measure, which I and others in the industry have expressed grave concerns about. I do want to provide full disclosure that the EU are actually advancing an efficiency measure for refineries, similar to what you're considering.

They, however, are implementing a data driven approach, using real data to define appropriate limits

versus just floating an aspirational but arbitrary number. The data they're using is based on actual performance from 2008 to date, and will require maintenance of this trajectory which requires continuing reductions by the industry of about one quarter of a percent per year.

This is essentially an order of magnitude different than what is being proposed by ARB in the base scoping plan, which would require 2.2 percent year on year to get a 20 percent efficiency metric of 2030. This clearly informs critical feasibility concerns with what ARB has proposed for California refineries, and I hope it gives pause to staff before continuing to go down this proposed path and create significant risk for both environmental leakage and the risk to good California jobs, many of which do not require a degree, as you've heard today.

Bottom line is you do not need a refinery measure to achieve emission reductions. The Cap-and-Trade Program will deliver them. You simply cannot meet the mandate of SB 32 otherwise. They will happen.

I would note, in closing, that the concerns outlined by staff about the cap-and-tax alternative equally apply to the refinery measure.

So we look forward to continuing the debate. Thank you very much.

CHAIR NICHOLS: Thank you.

MS. BUSSEY: Good afternoon, Madam Chair and Board. My name is Julia Bussey. I represent Chevron Corporation.

I want to say from the very beginning that we support also databased approaches, and we would like the Board to consider, given that we have more time, to re-examine a couple of areas that the scoping plan goes into.

And the first of which is the approach to criteria pollutants. I would like to submit that according to the Air Board's own documents, the capped stationary sources only equal 5 percent of the criteria and toxic pollutants in California. And yet, those same capped stationary sources equal 37 percent of the greenhouse gas emissions. The modeling that was done equates criteria pollutants ton for ton to greenhouse gases.

I think that it's pretty clear that that's not appropriate. And even if we shut down every capped source, we would only get a 5 percent reduction in criteria and toxic pollutants.

The second area I'd like you to reconsider is the refinery measure. And I know you've heard a lot about it today. But the one thing that I would like to let you

know is that that measure is flawed in its concept, and also in the amount that it's asking for. So the 20 percent is based on a simple barrel approach. Simple barrel, means simply greenhouse gases divided by product.

The simple barrel refineries, the most efficient ones, make less than 3 percent of clean California product. And so it seems clear that that is not an appropriate standard to use for the refineries in California.

Not only that, but refineries in California make different products and use different pieces of equipment. And therefore, you can't simply change out pieces of equipment to try to make every refinery like the other. So I want to give you an example of what kinds of emissions might be available reductions. The Chevron modernization -- Richmond modernization project cost \$1,000,000,000. It took 10 years to permit. And it reduced and it -- it improved our efficiency by 4 percent. So that's just an example of what can be done for what amount of time and what amount of money.

And therefore, I ask that you go back to work on that measure. And as many of the refineries folks have offered today, we'd be really happy to work with you and to work with other parties in trying to establish both what's the right amount of critieria pollutants to assume,

and also what's the best way to approach stationary source measures. And we fully support also using cap-and-trade for direct reductions, because this is what must occur under the current program.

Thank you.

MR. SKVARLA: Good afternoon. Mikhael Skvarla here on behalf of the California Council for Environmental and Economic Balance.

First, we support the California cap and trade just as we supported AB 32 in 2006 and through the scoping plan. The cap and trade provides the necessary cost containment, as well as protection against leakage that has brought our industries and labor unions to the table on this issue specifically over the last decade, I guess.

With regards to some of the reports that have been discussed, we appreciate the extension so that we have a chance to analyze it. We have noted and have brought to staff that there are some inconsistencies with the data to that end for the criteria pollutant portions of the OEHHA, and that may kind of skew the statistical analysis.

We'll continue to work with ARB staff, the air districts and OEHHA to make sure this gets corrected, and that these stationary sources that have to comply with the cap and trade are able to provide their input on that.

The district rules and the State rules don't always lineup on emission factors. And it's not an easy thing to figure out.

And so we want to make sure that the data is right and can be corrected, so that the analysis is as robust and complete as possible. So to that end, we continue to support cap and trade moving forward in this scoping plan with offsets and all the vital cost containment mechanisms and will continue to work with staff and provide information to the Board as we move on.

Thank you.

CHAIR NICHOLS: Thanks.

Hi, Dave.

MR. BISCHEL: Madam Chairman, members of the Board, my name is David Bischel. I am a Registered Professional Forester and President of the California Forestry Association. We represent about 4,000,000 aches of private forest owners, all of whom are either privately held or family-owned businesses.

And we have been actively involved in this process, as Mary knows, from the very beginning in terms of the advisory committee that was set up to create -- help create the forest carbon credits from the beginning involving forest owners, conservation organizations, State and federal agencies. Every third Friday for 2 and a half

years we met in this building to develop the foundation of the forest protocol, which then went to the reserve for their wire brushing, and eventually to you and your staff.

And what -- it is what we have today and is probably, I would guess -- not probably, I think it's the most universally accepted forest carbon credit certainly in the nation, and we're seeing Canadian provinces that are involved. And I think it's a prime example of how cap and trade ultimately can work. And we certainly would like to see the program continue.

We support working with your staff. We certainly support using science as the foundation, science and data as the foundation. I think we have found some inconsistencies in the data that's in the plan.

Certainly, the -- the dependency on the U.S. Forest

Service report on the forest products industry, it appears there's some differences there. We've tried to talk with the authors of that publication to identify what is different between their data. And it's very complex, of course, if you're talking about million board feet, or a thousand cubic feet, or hundreds of square feet at 3/8th differentials when you're talking about forest products, whether it's bone dry tons, green tons, dried tons.

So we look forward, I think, to try and figure out why the products that we come out don't -- aren't

fully represented in the -- in the report. And we'll do that.

We also would like to take a look at more closely some of the forest data, because certainly there's always lumpers and splitters. And Dr. Battles' study was a lumping activity. And I think we're certainly recognized, and I think the Board recognized, that California has -- the State of California has arguably the most powerful environmental protections in the nation, and they're very different than what Federal standards are, and others.

So we look forward to working with you on those issues, and thank you for the opportunity.

CHAIR NICHOLS: Thank you.

MR. CATIVIELA: Good afternoon, Chair Nichols, members of the Board. I'm J.P. Cativiela with Dairy Cares.

As you know, the scoping plan and the Short-Lived Climate Pollutants Plan, which is sort of a component of that, as well as SB 1383 passed last year by - welcome, Senator Lara - has set very ambitious goals for reductions from dairy farms in California, 40 percent by 2030. And, of course, those are goals that no -- we see nowhere else the world.

We're committed to working with you to meet those goals. We hope to do a lot of it on a voluntary

incentive-based basis and as early as possible in that timeline, so that there's not much left to do when it comes time to regulate.

We do appreciate the support for pasture dairies. We support them too. They're not appropriate everywhere in California, given the difference in climate and what resources that are available. And we do need other tools besides pasture dairies, if we're going to meet these goals.

And I think the Senator was well aware of that when 1383 passed last year that digesters would have to be one of the tools in our tool bag. Thankfully, they're also one of the best investments of GGRF funds. There have been quite a bit of study to show -- on return -- the bang for buck on the amount of GHG that's reduced by these is very, very good, and comparable to many -- superior to many other projects.

We are also interested in other types of strategies. And we believe there are many other ways we can reduce in GHG, and we're actively working to investigate those, and get the research done so we can quantify what those reductions are, so that we have other tools in the tool bag besides digesters.

But I want to leave you with a thought that, you know, digesters are an important tool, not the only tool.

They have the bang for the buck, and they provide the opportunity for many other environmental benefits besides GHG. They do reduce other criteria air pollutants, and they provide water quality benefits when designed properly.

And with the development of a transportation fuel component, we can move some of these environmental benefits off the dairy and into our environmental justice communities.

With that, we appreciate the opportunity and look forward to working with you and your staff on this.

Thank you.

CHAIR NICHOLS: Thanks. We have one last witness.

MR. TWIGHT: Good afternoon. My name is Cedric Twight. I work for Sierra Pacific Industries. Our comments are focused on the Forest Carbon Action Plan. In particular, our concern -- while we appreciate the Forest Carbon Action Plan's goals, I think that we can agree with most of those, we're concerned with Appendix G, and the modeling that's gone on with that effort from Lawrence Berkeley Lab.

The -- in particular, we're concerned with how high management effects are interpreted, particularly with respect to the forest sector. On page 20 of the

PowerPoint, you can see a forest curve that just precipitously drops in terms of total landscape carbon.

This is completely incongruent with our own understanding of what happens under high forest management activities. In particular, we modeled and estimated through our own inventory that we will be tripling our standing carbon stocks over the next 100 years under a high management regime, while doubling the amount of useful wood products that we're going to be getting from those timberlands.

And you may think well that's just -- you though one other estimate, but our estimate is based on actual forest inventory plots totaling more than 400,000 individual forest plots across our ownership. So we're pretty confident with our numbers, and we're really concerned that the modeling done by Lawrence Berkeley Lab are erroneous, and we would appreciate maybe that effort getting shifted over to CalFire, or possibly the University of California Agricultural -- Division of Agricultural and Natural Resources, so that we can feel more confident that they're coming up with answers that are accurate.

Thank you.

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CHAIR NICHOLS: Okay.

Is there anyone else who's here to testify on

1 | this item?

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2 Yes. Mr. Serna.

BOARD MEMBER SERNA: Thanks, Chair. If there aren't any others that are speaking --

CHAIR NICHOLS: There are not.

BOARD MEMBER SERNA: -- we're at that point in the program where you're expecting the --

CHAIR NICHOLS: Yes, we can close it off.

BOARD MEMBER SERNA: You're expecting

conversation or deliberation --

CHAIR NICHOLS: Yes.

BOARD MEMBER SERNA: -- at least commentary from Board members. I'd like to chime in at this point.

First, I certainly want to start by -- as we customarily do here thanking staff for all their great work to date. I know that there are some members of the EJAC that had to leave early, but I do want to extend my thanks to all of their work as well. And I was part of the joint meeting yesterday, and agree with all the positive comments that have been issued so far this morning and this afternoon about how productive that was.

And I think it's actually a good idea that we perhaps institutionalize regular meetings with the EJAC for what it's worth.

I do agree with the Chair, I think it's a great

idea to extend the amount of time that I think all of us need to make sure that we have as, no pun intended, airtight our analysis as possible.

(Laughter.)

BOARD MEMBER SERNA: But I do have a -- I do have a question for our Chief Economist. It has to do with the presentation on cap and tax. So I understand there's going to be further analysis about that particular alternative. But to date, I don't know if it was mentioned in your presentation, Emily, or not, the effect that we think that might have, specifically on the ag sector, how would you characterize that relative to some of the other industries.

CHIEF ECONOMIST WIMBERGER: So that modeling work is currently under way, and we are hampered a little bit by the confines and the limitations of the modeling that we're using. We can look at impacts to different sectors, both in terms of output by industry, including ag. Ag is sort of lumped together with forestry in the models that we look at, so it's a little hard to disentangle specifically.

But we are looking both at employment by industry. And also as part of the regional impact assessment, we're going to be able to look at location of employment. So we can look both by county, by region in

California, and by census tract to really see what the changes in employment are across all of the -- the proposed plan and all the alternatives in specific areas.

BOARD MEMBER SERNA: I think it would be very helpful for me, and I would presume those in the environmental justice community, not just those on our EJAC, would also be interested to understand specifically under that particular alternative what if any adverse impacts there may be on employment, specifically the farmworker community in California. I'm going to be very interested to understand that, as you go forward and conclude your analysis on that particular alternative.

So I just wanted to make sure that you knew that you have one. You may have others up here that are also likewise interested.

Thank you.

CHAIR NICHOLS: I want to remind us all that this is the second in a series of meetings on this. A lot of interest, obviously. A lot of very different kinds of comments. A number of individuals and organizations who have brought forward data of their own, or who have raised questions about our data that require us to take another look at things. Certainly, some ongoing analytical work that needs to be done.

I think that the presentation today was helpful

in kind of signaling what the staff is working in this regard, but it might be helpful to give a little more sense of what you expect to be doing over the next couple of months, in terms of the major activities relating to finishing up the scoping plan.

And again, just to remind people, if you don't put a draft out, then there's nothing for people to react to. So while sometimes it's a little disconcerting to find out what some of those reactions are, it's also very helpful, because it does then focus our next round of effort on the things that we understand are the ones that need the most work.

And I think -- I don't want to speak for the people who are writing the plan at this point, but I do think it's -- a big effort has gone on to try to evaluate -- well, first of all, to select, and then to do a meaningful evaluation of alternative scenarios, because it's not just a question of cap and trade versus no cap and trade. There are quite a few other constructs that people have put forward, and variance on variance.

And we want to try to come up with legitimate assessments of those, and to be as open as we can to improvements, because that is what we do.

It wouldn't be reasonable to expect, you know, the organization that's implementing the program to

suddenly decide that it was a terrible idea, especially when the facts that we have seen so far have indicated that it's been very successful. But I have not detected any lack of willingness to look for alternatives if there are ways that we could do things better going forward.

So I just want to -- I just want to emphasize that, but I would like you to give us a little more information about sort of what people are actually up to here.

DEPUTY EXECUTIVE OFFICER CHANG: So I think that Emily did a good job in her presentation in talking about some of the things that we're doing in response to both the Board's direction and questions, as well as stakeholder's direction and quest -- stakeholder's direction and questions.

And so some of those are refinements of some of the work that we've been doing on the economic modeling. We heard a little bit about sort of the -- some of the refinements on the cap and tax. I think that to the extent that there are -- if folks have questions about how we have designed that, because, you know, you can design, as you said, anyone of these scenarios in many, many different ways. And oftentimes the assumptions that you make in your analysis really affect the outcome of that analysis.

What we've been trying to do in the workshops is provide enough information about what we're doing and what we're assuming, so that folks can come and tell us, oh, that's not what we were thinking, when we were thinking a cap and tax. And so we're very open to that input.

We had a workshop last week to get into technical detail with stakeholders about the methodologies that we're using, for the refinements to the economic analysis, as well as what we're planning to do on the health analysis that the Board had directed us to do.

Our plan is to have another workshop. We want to make sure that we have a chance for folks to see the results of these analyses before we just kind of pop them out in a draft, and no one has any chance to have any input. And we don't have the chance to have feedback from stakeholders. We take a lot of pride in doing good work, but I think having lots of folks take a look at your work is always a good thing.

So the intention is we're working through these refinements. We would have another workshop. And as the Executive Officer said, we're working on schedule now with the delay. So we would plan to provide on the website, as well as a listserve, a schedule of, you know, when the comment period will end, when we'll have another workshop, and then before the Board hears the final plan, we would

plan to put out the next draft of the plan that incorporates all of this discussion that we've been having and the new analysis.

CHAIR NICHOLS: So I -- I've had some feedback just as I've been going around in the last few days from people who have said maybe we should be doing fewer workshops, because there's so much work that goes into doing workshops, and there more -- the format tends to be a presentation and then people go back and say, oh, my God, that was -- you know, I really didn't agree with that.

And then they -- they don't necessarily even react on the spot. They wait until later to come in with their comments. And so you get into this kind of do-loop of -- that can be kind of distracting.

I'm not trying to give direction at this point, but I would suggest that the need is for actually more analysis and maybe time to work on writing some of these things, than it is necessarily for just more meetings.

I understand the EJAC is also planning more meetings or workshops, is that also true?

EXECUTIVE OFFICER COREY: They'll be having community meetings, my understanding is, in the March time frame, which the discussion about the comment period will allow some extension to reflect those community meetings.

CHAIR NICHOLS: So maybe we could confer with them about how to make those meetings or workshops as useful as possible, too, in terms of really being a two-way communication.

Any other --

BOARD MEMBER GIOIA: Yeah.

CHAIR NICHOLS: Yes. Senator Florez

BOARD MEMBER FLOREZ: Thank you.

I just have --

BOARD MEMBER GIOIA: Madam Chair.

BOARD MEMBER FLOREZ: Just to maybe go along the path of the Chair and also my colleague, Mr. Serna, I think the issue for the Board will be once we get this analysis is to understand, in some sense, what the inputs were. It's not to get so into the weeds, but not, in some sense, to ignore that.

So, you know, I think the most important number in the world for this Board and probably the world the social cost of carbon. And I'm just wondering how -- when we begin to model that, even in the analysis you put forward, you know, how you derive that, what that is, what the input is going to be?

I'd be remiss to say that the Trump

administration obviously would like to take that

completely away, but the courts have said you can't do

that. So then again the court didn't assign a value either.

So I'm kind of wondering what our value is, what that cost is? Is it \$36? Is it \$6? Is it \$125? I mean in some sense, we're discounting this to make a decision from a Board perspective. And I get the discount rate, but I don't understand, in some sense, what the inputs were to get to some of those social costs. Mr. Serna mentioned farm workers, agricultural land. We've heard pasteurized kinds of issues today.

I think somehow not to get too in the weeds, but I think it would be important for all of us to kind of understand how we derive that. We all get we have to do a discount rate, but what goes into that is kind of important to some of us here definitely on the dais.

And I also would like to know, you know, we all know what's going on nationally, but if there's some outcome that would impact us or not, I'm not sure legally, you know, how that operates. But at least at some point in time trying to figure out what that looks like as we come back, that would be important to me as well.

CHIEF ECONOMIST WIMBERGER: I can do a quick overview of the social cost really quickly. It is a very complicated issue that requires not just economic consideration, but atmospheric analyses, projections

globally through 2050.

But as we outlined --

BOARD MEMBER FLOREZ: Take us through each of those really carefully right now.

(Laughter.)

CHIEF ECONOMIST WIMBERGER: Yeah, exactly.

(Laughter.)

CHIEF ECONOMIST WIMBERGER: I think we all want lunch at some point.

But to take it -- to put it in the context of what we've done in the scoping plan, we're really relying on estimates that the EP -- U.S. EPA has used. There's 3 pretty well known models that the tires have been kicked extensively. And then the U.S. EPA has looked at those models and came up with a range, based on different discount rates, of what the social cost of carbon would be.

And so this is what we're using in the scoping plan to look at social cost. While not specifically called out in AB 197 as the social cost of carbon, the social cost, as defined in AB 197, takes the definition of the social cost of carbon that is used by U.S. EPA.

So what that -- it's looking at, it's looking specifically at the impact of a ton release of carbon in the atmosphere in a specific year, and then we discount

that back to today.

I think there's an important distinction that we need to think about in terms of the social cost of carbon, and then a comprehensive analysis of costs related to health impacts, related to indirect land use, related to other issues that aren't necessarily captured in the social cost of carbon, but that are costs that are borne.

And so we -- you know, we usually think about direct costs of reducing emissions, or in terms of cost effectiveness. I think the social cost is one additional aspect when we're thinking about the social -- the overall cumulative cost, but it's not the whole picture.

And so I think a lot of what we're trying to do in terms of incorporating the health impacts and thinking more broadly about benefits and avoided damages is to try to pick up some of these issues related to land use, related to health impacts. And that's really part of the whole picture, but it goes -- it goes beyond social cost as analyzed in the scoping plan.

BOARD MEMBER FLOREZ: Okay. Great. Thank you. And as you begin to flesh those out, it would be great to hear. I mean, this may ultimately be the standard going forward as we -- you know, someone just mentioned Kyoto Protocol, and AB 32, and how that all came about.

I mean, this might be, at some point, the

standard that other states, other nations, and others follow, so I think understanding that -- I would only add 2 factors to what you're looking at. I think wealth is obviously a discounted factor. And some people think folks are going to get wealthier and some folks might think just the 1 percent are going to get wealthier.

So I think overall, as you begin to run that model, I think there's always an assumption discounting that we continue to get wealthier as a society over generations. And I'm not necessarily sure that's a true input for California, particularly if you take Mr. Serna's issue about rural California, which we heard a couple of times today.

So I would say, you know, a discount of a discount, or a subset would be good to look at.

CHAIR NICHOLS: Thanks.

You know, when 197 passed and we realized that we were going to have a bigger Board, the ARB shamelessly went out and asked for funding to fix this room so that the person sitting in the middle could see to both sides and have some kind a system for knowing who wants to talk.

(Laughter.)

CHAIR NICHOLS: So instead, I now have people like waving at me madly hoping to get some attention. And I apologize if I don't look in the right direction at the

right time. But I did say to John Balmes that I would recognize him, because I know he has a train, and then I'll turn to this end. Okay. Thanks.

BOARD MEMBER BALMES: And you noticed I got up and asked her.

(Laughter.)

BOARD MEMBER BALMES: So first off, for those who attended yesterday's meeting with EJAC, I came away from that pretty energized, in large part because in post-meetings with the CARB staff, I really sensed a willingness to sort of embrace public health as part of our mission. I know we've been saying that for a long time, but I really feel it now. And, you know, as somebody who is the public health representative on the Board, I look forward to this sort of new orientation.

I'm going to say a few things that I said yesterday, because this is now a formal hearing. With regard to the economic analyses, if, you know, cap and trade comes out as the best, I don't have a problem with that. But as I said yesterday, I don't think we should take a carbon fee/tax off the table for the future. And I'm talking about decades from now, we might really need to have a carbon fee to reach our greenhouse gas emission reduction goals.

So I just think keeping that open mind,

especially since there are now conservatives, Jim Baker, for one who are talking about a carbon tax and -- you know, we'll see but...

The other thing I would like to reiterate from yesterday is that while we focused on cap and trade a lot, both because that's on the radar of EJAC, and because the initial OEHHA report focused on the emissions related to cap and trade, I think we should be looking at community benefits -- community impacts of all our suite of AB 32 climate change mitigation policies, not just cap and trade.

And, you know, I appreciate that OEHHA is going to do this for other elements of our repertoire. As many you of know, you've heard me drone on about getting co-benefits with regard to reduction of criteria and toxic pollutants, as we get reductions in greenhouse gas emissions at cap facilities, I really think we need to have that clearly spelled out in the scoping plan. And I think we certainly do sort of conceptually, but I'd like to see, as I said yesterday, a few lines committing to the adaptive management program.

And I agree with Chairman Nichols' comments in her summary statement yesterday at the EJAC meeting, that adaptive -- what we currently do with adaptive management is kind of whimpy. That's a quote. I said it first, but

you agreed with me.

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CHAIR NICHOLS: I said it. I said it.

BOARD MEMBER BALMES: But she also said, and this is where I really sort of am pleased about what I think -- what I sense is sort of a culture change, is that AB 197 requires us to be concerned about toxic emissions in all our work.

And I told several staff, including Richard and Edie, that I will be happy to work hard on this aspect to try to get the public health co-benefits.

And with regard to the OEHHA report - I thank my long-term colleague Lauren Zeise for that report - one of the bullets in the - I don't know - either the executive summary or the conclusion, is that they need better data. And the data is siloed. We heard that same concern from the Cushing report authors.

And I participated briefly in a conference call back in the fall with the Cushing report researchers about trying to facilitate access to the data. I don't blame anybody for the mess of the data that we have, and the siloed nature, but we really have to work on siloing it, and making it available both for OEHHA and our academic research colleagues.

And then the last thing I wanted to say, because I missed the January meeting, I didn't hear about this

effort to monetize, you know, public health benefits -potential benefits of our - I don't know if it's
specifically cap and trade or is all of our -- okay.

Good -- all of our climate change mitigation efforts.

I applaud that, but I just want to caution, it isn't easy to monetize health impacts. You have to quantitate -- quantify them first, and that's not easy. There are people who's whole research careers are built on that kind of quantification. And then going from the quantification to the monetization is not easy.

And then I was really excited about trying to monetize the public health benefits of active commuting, but that's even, you know, more nascent in, you know, a -- in people's efforts. So again, I think we should be doing this. I applaud staff. I applaud all my fellow Board members for, I guess, pushing staff to do this.

I applaud staff's efforts. And again, I'll be willing to work on this. It's in my bailiwick.

Thanks.

CHAIR NICHOLS: Okay. Thank you. Down to this side. John, and Judy, and then Diane.

BOARD MEMBER GIOIA: Thanks. I'll be brief.

I was one of the individuals that Dr. Balmes had talked about really trying to push this health analysis, and understanding that it's not -- that there are

limitations and challenges, but that, you know, we rely so much on economic analysis, and to take that as sort of science, knowing that there's actually, you know, a lot of uncertainty there as well.

And that we need to do as good of a job we can to try to quantify at least a range -- to understand the health benefits and health costs of all of these policies, because oftentimes we put things so much in terms of -- we under -- we understand job impacts, and that's important, and we need to understand sort of health benefits as well from these strategies, and -- and so we have a -- more of a, you know, as thorough an analysis as possible. So -- and I appreciate the update you provided.

And as I said at the last meeting, I know we're going to have a stand-alone sort of health analysis. What often happens when we do a stand-alone health analysis, folks say it's over there, but it's not in the economic analysis. And so people still rely on the economic analysis without sort of quantifying health.

But I think to the extent we can try to incorporate some of that into the economic analysis itself, that that's really important. So we raise that issue up. So I appreciate that.

I do think also on the economic analysis, we need to strive to have a clear -- use lay language, because,

you know, economists aren't very good about using lay language. They're like engineers.

(Laughter.)

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BOARD MEMBER GIOIA: As I say this to a group of engineers and economists, that it then allows others to sort of take -- I think the example, you know, Chair Nichols sort of corrected a comment that was made today about taking sort of a sentence and a paragraph from the economic analysis and say here's the total context. So we need to lay that context out in a clear way, because I -- we know that there will be a lot of sometimes accurate and sometimes distorted interpretation of our economic analysis. So we need to do our part to make it clear, a lay version of it, you know, whatever you call that, so that it can be picked up, because I think that's going to be -- that's going to clearly be a big issue as we go forward.

So those are the really 2 points. And I agree delaying, as we got into this discussion yesterday, makes sense. It's reasonable sort -- I don't want to call it delay -- it's sort of thoughtful time to finish something that is extremely important, and continuing to have the meetings with the EJAC makes sense.

CHAIR NICHOLS: Okay.

Yes, Ms. Mitchell.

BOARD MEMBER MITCHELL: Thank you. Thanks for your comments, too, John. I think your input has been very valuable. And thank you to staff for all you've done on this so far. And thank you to the EJAC Committee for coming forward with all of their recommendations.

I want to support Phil Serna's recommendation, Supervisor Serna, to continue meetings with EJAC on some kind of regular basis, maybe twice a year. But that encounter where we're face to face sitting around the table with all of them and hearing their issues was really valuable for me, in particular, and maybe for others as well. But I think, you know, that was very good communication.

There's a couple of things that are concerning me a little bit on the scoping plan. I had kind of a Eureka moment yesterday when Chair Nichols brought up AB 197, as we were meeting with the EJAC community. It seems to me that AB 197 really transforms a lot of what we are doing here, because it requires us now to consider the impact of what we do with the criteria pollutants and toxics. And also, it requires us to look at direct emissions.

So while -- before we were pushing the co-benefits approach to all of our greenhouse gas reduction efforts, now we're required to do that. And as we've seen in some of the things that we have done here to

reduce greenhouse gases, it sometimes does mean increases in the criteria pollutants.

I mean, we saw that with biofuels. We had to really work hard on the biofuel rule to get that refined, so we weren't increasing NOx as we were lowering greenhouse gases, so -- and I'm not sure quite how this is going to be implemented, which is why I turn to staff and say I do think this will require a much closer collaboration with air districts. And we did talk about this at the CAPCOA meeting last summer, where Supervisor Gioia and I attended that meeting.

And I want staff to kind of think about how we're going to implement that, and how we can work closer with the air districts, because we're going to do -- be dealing with stationary sources as we -- as we get through that process.

The other thing that I'm wondering about - and I need some help from staff and others on this - is that if we move from a Cap-and-Trade Program to a cap and tax or another kind of cap program, what does that do to the efforts that we have been engaging in in connecting with Quebec, Ontario, maybe even other states, because the reason those connections work is because of the trading aspect of that.

If you take the trading aspect out, we wouldn't

have that ability to connect or there wouldn't be that interest in connecting. So we need to think about what is the value of that for our program? It seems to me there is a value to that, because global warming isn't just happening in California. And this pushes the agenda in a more global way, but it also gives other jurisdictions the opportunity to connect with our programs on which we've already done all the research, and work -- work ahead with those.

So that's something I think to think about, and -- because I don't see how it works with a cap-and-tax program. I don't know whether others think that, but I don't see how that would work.

Thank you.

BOARD MEMBER TAKVORIAN: Thank you. Yes. Thank you. It's been a busy couple of days.

(Laughter.)

BOARD MEMBER TAKVORIAN: And it's been a great couple of days. I think that -- I want to say again I think that we are -- we're fortunate, I think, to have a Chair, and a staff, and Board that was welcoming of the workshop that we had yesterday with the EJAC. And I think it's a -- it was a very important move, and an important moment to have that conversation. So I just want to again express my appreciation to everyone for that.

And I think continuing those meetings would be excellent. And I think given the conversation or the comments that were just made about the health assessment, that that might be a really important topic to discuss. Health is what's driving a lot of the comments that come from the environmental justice communities as we all know. So I think that that could be a really good topic for a future workshop.

I also want to say, and I think off of your -your comments, that it -- it's really about integration,
you know, and I think 197 really is pushing us to
integrate more, but I think SB 375 pushed us to a certain
degree as well, and we can take advantage of that. And
I -- I also think regarding the market mechanism that it's
really about what the best program is to achieve our
overall goals. And each of them may benefit more in
certain sectors, whether it's the economic sector, or the
health sector, or the quality of life sector. There's
trade-offs across the Board.

So I think we have to look carefully at that. I want to thank Chair Nichols for extending the timeline. It will provide everyone, as we've heard today, from many sectors the time and resources to analyze the data on the part of staff to then respond to that.

I think it's important for us to come forward with what the comment period deadline will be as soon as possible. And also, if it's the June meeting, I understand there may be some questions about what date that is. So if anyone knows that today, that would be really helpful.

I wanted to thank the OEHHA staff for being here, and for the report that you provided. I think it underscores the fact that environmental justice disadvantaged communities are most impacted by these emissions, and it's clear that they -- that we need more data.

And so once again, we have that information. So, of course, there's a level of impatience related to knowing that our communities are the ones that are the most impacted, and knowing that our communities are the ones that have the sickest kids, and the highest asthma rates, and the highest cancer rates. So we need to move forward with the strategies. And it's not that we're not with any. We are, but there -- you can understand -- I forget which gentleman it was that said that his child is in high school now.

And I've watched kids grow up too, and watched them watch their parents put a lot of their time and energy, which they don't have much of, into trying to

change policies, and watching their kids grow up, and continue to be impacted by having various diseases, especially respiratory diseases. So I think that's -- we're all motivated by that.

In regards to the economic analysis, I appreciate the description of the refinements and the -- and the beginning analysis of the cap and tax. I wondered -- I have questions. And I don't know if those can be answered today or in the future about which of the sectors that you are particularly concerned about that would be challenged to reduce at the projected levels, as is indicated in the presentation? Are there sectors that can reduce at higher levels? So how does that balance out?

And I think the cost and benefits comparison that you talked about doing will be important to see going forward.

I had questions about the health analysis, but I think that has been -- those -- that's been fully discussed. So those are my questions.

CHAIR NICHOLS: Okay. Thank you.

Ms. Berg.

Oh, I'm sorry. Go ahead.

BOARD MEMBER DE LA TORRE: Thank you. I wanted to just make a comment about the jobs piece. I said it yesterday, there is a comprehensive analysis of green jobs

that's happening. UCLA is doing it. And hopefully at some point this year, we'll get those results. It will be the most comprehensive look that we've had of green jobs, what's out there, how many, you know, what kinds, et cetera.

So I think that's a very important piece that will inform a lot of what we do going forward, and it will be great for people to know, you know, what they are, how many there are, if a lot of what we're talking about is growing green jobs. Well, we need to know what they are to begin with.

The second part is actually a conversation I had yesterday after the session, that made a lot of sense to me and resonated with me, which is a lot of the job skills that we're talking about are just add-ons to existing skills. It's a mechanic -- an auto mechanic who learns how to work on an electric vehicle.

I remember when I had a hybrid back in the mid-2000s, at my dealership there was only one mechanic who worked on the hybrids, because they didn't want to touch the batteries. And so it's just added skill sets to what people are already doing.

And I'm sure that replicates itself. Yesterday, we talked about -- I forget the name of the company, the refinery in paramount that does biojet fuel. That's a

refinery. I'm sure it's not that different from refining petroleum. And so there are people working in a refinery doing good stuff, instead of not so good stuff.

And so we have to think about those add-on skill that will augment the skills that people already have that are already doing it to adapt to this.

And so I think we need to think about that as well.

Thank you.

VICE CHAIR BERG: And just to piggyback on what you were saying, Hector, my favorite all-time move this year is Hidden Figures. For those of you that have not been able to go see it, make time, Netflix, whatever, when it comes out.

But remember, when NASA was first created, we had banks of human calculators, literally -- no, calculators. People that were mathematicians and they called them calculators. Human -- no, they didn't have computers then.

(Laughter.)

VICE CHAIR BERG: And what was coming -- and they were mostly women, but I wasn't going to add that part.

(Laughter.)

VICE CHAIR BERG: But at the same time they were building this great big huge room, because what was

coming, the IBM computer. And these women did see the change of the tide coming, that pretty soon they were going to be out of jobs, because the computer was going to replace the ability to calculate at such a rapid rate.

But one thing they discovered is that the human brilliance can never really be totally replaced. It's just retooled, as you were saying. And they went out and learned programming, they readjusted their skill set to drive what we know computers today to go from a room of this size, calculating down now to our cell phones, our smartphones. And so thank you for bringing that up, Hector. That's just so true.

CHAIR NICHOLS: And giving us an opportunity to talk about a great movie.

(Laughter.)

CHAIR NICHOLS: All right. Yes, Senator Lara.

SENATOR LARA: Thank you, Madam Chair.

Also just in thinking -- first of all, I would never be a human calculator. You can ask Mrs. Brown at Stevenson Junior High in Boyle Heights --

(Laughter.)

SENATOR LARA: -- my algebra teacher who barely passed me.

(Laughter.)

SENATOR LARA: I wanted to again echo Supervisor

Serna about doing those EJAC meetings. I'm just sorry I was just a little to late and missed -- missed that meeting, but would love to participate, and also dovetail on what Hector was saying in terms of the job mapping.

We know there's a study coming. But again, stressing, particularly for us in the legislature, and particularly in the Senate trying to prove that we can decouple our economy from carbon and still be successful, not only in our economy, but actually job creation.

And given the tenor and rhetoric that we're hearing at the federal level, to be able to prove that, we can not only improve the air quality in our most high priority communities, but actually reinvent those local communities, and their local economy. We know that in a lot of our small rural areas, if we invest in job creation, that really transforms the local economy. And we want to be able to prove that, not only, you know, through our work, but politically around the world.

And then the other question I had -- or the other thought I had was in terms of the linkages to other jurisdictions ensuring that, you know, as we move forward with the trading system, that we have -- and I know there's been interest from other entities from around the world to link to our system, is there a comprehensive look at who's ready, are -- and who has the sophistication to

be able to link to our program -- our current system, so that we can continue to strengthen it and prove through this auction program that we can continue to build partners.

Again, it was said earlier, climate change is not just happening in California, but we're inextricably linked to the rest of the world. So I just wanted to offer some thoughts on that. And I believe Hector that the entity you're talking about was AltAir in Paramount, who are doing great things in my district.

(Laughter.)

CHAIR NICHOLS: Thank you.

ARB has been involved over the years, as has CalEPA and the Governor's Office in a number of efforts to sort of assess readiness for linkage when trading across the world. And we're involved in a number of efforts. The only one that's pending at the moment is the official linkage with Ontario. But we have a -- we do have sort of a working list of organizations that are talking to us, and we'd be happy to share that.

Okay. I believe that we can draw this presentation to a close.

Before we adjourn, we are required to take public comment in an open comment period on any topic that isn't included on our agenda. And so for 3 minutes, we will

hear from Eileen Boken who has been sitting here patiently all day.

MS. BOKEN: All right. Thank you. Eileen Boken San Francisco resident. Here in Sacramento the same script seems to be playing out that regular -- regulations will negatively affect the future of the refineries, particularly those in the Bay Area.

However, I believe what will have the most impact on the future of the refineries is consumer choice.

Consumers can now choose from electric, plug-in, flex fuel, and hydrogen fuel cell vehicles. One manufacturer of hydrogen fuel cell vehicles states, "It feels good to drive change in California".

According -- regarding hydrogen, discover the element that's fueling the turning point. If we are at a turning point, how will we turn the page in terms rules such as the Bay Area, rule -- proposed Rule 1216?

I believe there is the model with PG&E and the Diablo Canyon Nuclear Power Plant. Diablo Canyon will be decommissioned in the next 7 to 8 years. PG&E has committed to convert the facility into clean energy plant and retrain all 1,500 workers in clean energy technology, so there will be no net job losses.

The following are excerpts from the Los Angeles

Times from June of last year, and I quote, "One of

California's largest energy utilities took a bold step in the 21st century electricity revolution with an agreement to close its last operating nuclear plant, and develop more solar, wind, and other clean power technologies".

"'California is already a leader in curtailing greenhouse gases', said Peter Bradford a former member of the U.S. Nuclear Regulatory Commission. Now, they're saying they can do even -- go even further. That's potentially a model for other situations".

"PG&E Chief executive Tony Earley acknowledged the changing landscape in California, noting that energy efficiency, renewals, and storage are the central to the State's energy policy. To craft Tuesday's proposal, PG&E worked with the International Brotherhood of Electrical Workers Local 1245, the Coalition of California Utility Employees, the Natural Resources Defense Council, Environment California, Friends of the Earth, and the Alliance for Nuclear Responsibility".

Thank you.

CHAIR NICHOLS: Do you have a written statement that you brought with you?

MS. BOKEN: No.

CHAIR NICHOLS: Oh. Okay. All right. Well, we have a court reporter, so -- all right, that's it then.

Without any further ado, we will be adjourned.

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